STR-VX500

SERVICE MANUAL

E Model

This set is the tuner and amplifier section in MHC-VX500.

SPECIFICATIONS

Amplifier section

The following measured at AC 120, 220, 240V 50/60 Hz

DIN power output (Rated) (FRONT)
120 + 120W (6 Ω at 1kHz DIN)

Continuous RMS power output (Reference)
FRONT SPEAKER: 150 + 150W
(6 Ω at 1kHz, 10% THD)

Inputs	MD/VIDEO 1 IN (phono jacks): voltage 450/250mV, impedance 47kΩ AV INPUT AUDIO (phono jacks): voltage 250mV, impedance 47kΩ MIX MIC 1/2 (phone jack): sensitivity 1mV, impedance 10kΩ
Output	MD/VIDEO 1 OUT (phono jacks): voltage 450/250mV, impedance 1kΩ PHONES (stereo phone jack): accepts headphones of 8Ω or more. FRONT SPEAKER: accepts impedance of 6 to 16Ω REAR SPEAKER: accepts impedance of 16Ω SUPER WOOFER: Voltage 1V, impedance 1kΩ

Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section

Tuning range	87.5 – 108.0MHz
Antenna terminals	75Ω unbalanced
Intermediate frequency	10.7MHz

AM tuner section

Tuning range	MW: 531 – 1,602kHz (with the MW tuning interval set at 9kHz) 530 – 1,710kHz (with the MW tuning interval set at 10kHz) SW: 5.95 – 17.90MHz (with the SW tuning interval set at 5kHz)
Intermediate frequency	450kHz
Antenna	AM loop antenna External antenna terminal

General

Power requirements	120V, 220V or 230 – 240V AC, 50/60Hz Adjustable with voltage selector
Power consumption	290W
Dimensions (w/h/d)	Approx. 288 × 205 × 375mm
Mass	Approx. 8.6kg

Design and specifications are subject to change without notice.

FM STEREO/FM-AM RECEIVER

MICROFILM

SONY®

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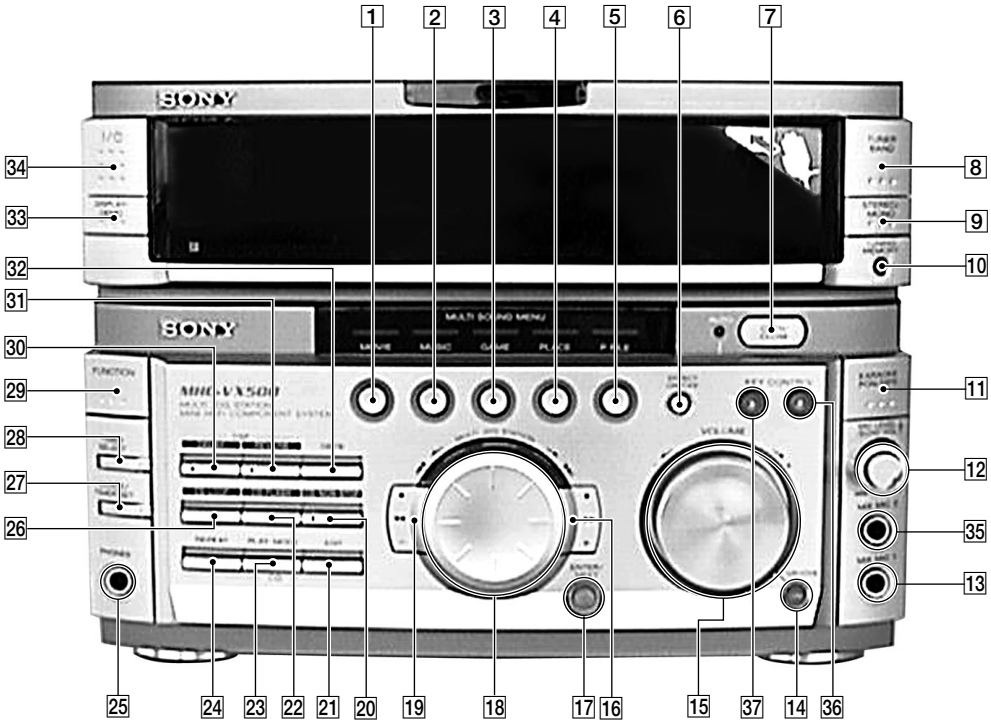
SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SECTION 1
GENERAL

Front Panel



1 MOVIE button
2 MUSIC button
3 GAME button
4 PLACE button
5 P FILE button
6 EFFECT ON/OFF button
7 OPEN/CLOSE button
8 TUNER BAND button
9 STEREO/MONO button
10 MEMORY button
11 KARAOKE PON/MIX button
12 MIC LEVEL/ECHO VOL dial
13 MIX MIC1 jack
14 GROOVE button
15 VOLUME dial
16 ►► + button
17 ENTER/NEXT button
18 MULTI JOG STATION dial
19 ◄◄ – button
20 NON-STOP button
21 EDIT button
22 FLASH button
23 PLAY MODE button
24 REPEAT button
25 PHONES jack
26 LOOP button
27 CLOCK/TIMER SET button
28 TIMER SELECT button
29 FUNCTION button
30 PROLOGIC button
31 DSP button
32 DBFB button
33 DISPLAY/DEMO button
34 I/⏻ (POWER) button
35 MIX MIC2 jack
36 KEY CONTROL (♯)
37 KEY CONTROL (♭)

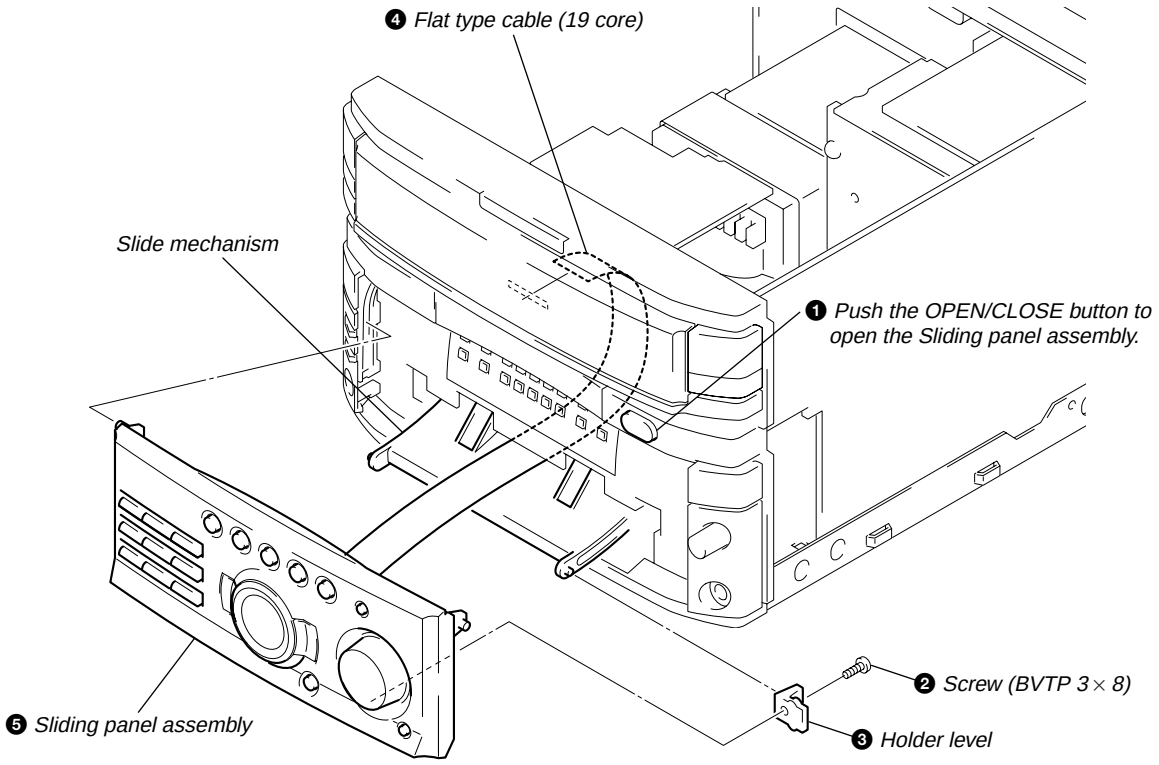
Rear Panel

1 SYSTEM CONTROL jack
2 ANTENNA terminal
3 REAR SPEAKER terminal
4 MONITOR OUT jack
5 FRONT SPEAKER terminal
6 MD/VIDEO 1 jack

SECTION 2
DISASSEMBLY

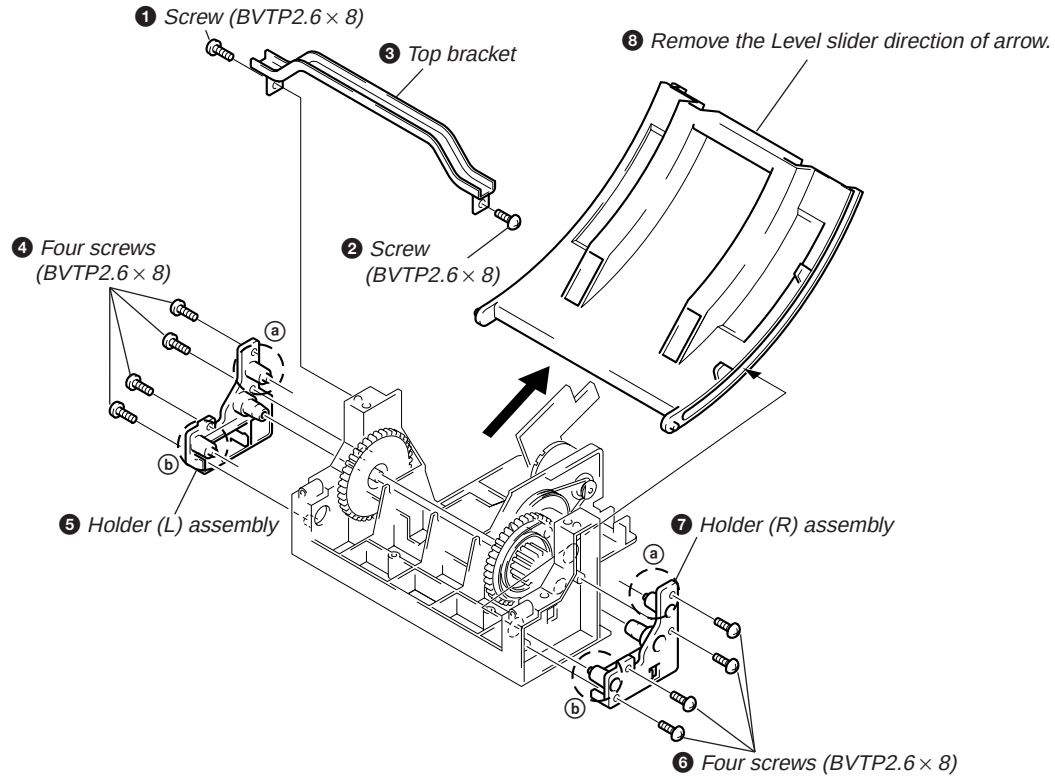
Note: Follow the disassembly procedure in the numerical order given.

2-1. SLIDING PANEL ASSEMBLY


❹ Flat type cable (19 core)
Slide mechanism
❶ Push the OPEN/CLOSE button to open the Sliding panel assembly.
❷ Screw (BVTP 3 × 8)
❸ Holder level
❺ Sliding panel assembly

2-2. LEVEL SLIDER

(Perform this DISASSEMBLY after the front panel is removed.)


❶ Screw (BVTP2.6 × 8)
❸ Top bracket
❽ Remove the Level slider direction of arrow.
❹ Four screws (BVTP2.6 × 8)
❷ Screw (BVTP2.6 × 8)
ⓐ
ⓑ
❺ Holder (L) assembly
❼ Holder (R) assembly
❻ Four screws (BVTP2.6 × 8)

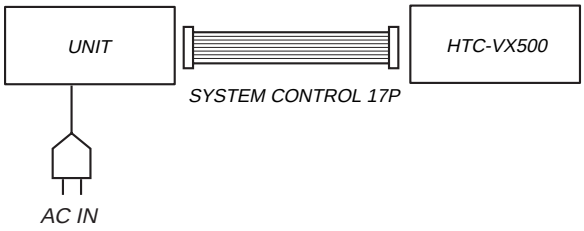
NOTE FOR INSTALLATION:

Attach in the reverse order, but make sure the rollers (ⓐ, ⓑ) of the holder (L) assembly and holder (R) assembly fit into the grooves of the level slider.

SECTION 3
SERVICE MODE

Connections and Operations When Used Alone

Normally, use the unit connected to the HTC-VX500 as follows.
Basically, when servicing the unit, connect the unit as follows.



Even when not connected to the HTC-VX500, the unit can operate alone as it mounts a power supply (some functions will however not be available).

MC Cold Reset

• The cold reset clears all data including preset data stored in the RAM to initial conditions. Execute this mode when returning the set to the customer.

Procedure:

1. Press three buttons [EDIT] , [ENTER/NEXT] , and [DISPLAY/DEMO] simultaneously.
2. The fluorescent indicator tube becomes blink instantaneously, and the set is reset.

CD Delivery Mode (This mode can be used only when the HTC-VX500 is connected.)

• This mode moves the pick-up to the position durable to vibration. Use this mode when returning the set to the customer after repair.

Procedure:

1. Press [I/⏻] button to turn the set ON.
2. Press [LOOP] button and [I/⏻] button simultaneously.
3. A message “LOCK” is displayed on the fluorescent indicator tube, and the CD delivery mode is set.

MC Hot Reset

• This mode resets the set with the preset data kept stored in the memory. The hot reset mode functions same as if the power cord is plugged in and out.

Procedure:

1. Press three buttons [REPEAT] , [ENTER/NEXT] , and [DISPLAY/DEMO] simultaneously.
2. The fluorescent indicator tube becomes blink instantaneously, and the set is reset.

Sled Servo Mode (This mode can be used only when the HTC-VX500 is connected.)

• This mode can run the CD sled motor freely. Use this mode, for instance, when cleaning the pick-up.

Procedure:

1. Select the function “CD”.
2. Press three buttons [FLASH] , [ENTER/NEXT] , and [KARAOKE PON/MIX] simultaneously.
3. The Sled Servo mode is selected, if “CD” is blinking on the fluorescent indicator tube.
4. With the CD in stop status, press [▶▶ +] button move the pick-up to outside track, or [– ◀◀] button to inside track.
5. To exit from this mode, perform as follows:
   1) Move the pick-up to the most inside track.
   2) Press three buttons in the same manner as step 2.

Note:

• Always move the pick-up to most inside track when exiting from this mode. Otherwise, a disc will not be unloaded.
• Do not run the sled motor excessively, otherwise the gear can be chipped.

Change-over of FUNCTION Name

• The FUNCTION name of external input terminal can be changed over to VIDEO 1 or MD. With the FUNCTION selected to “MD”, about 5dB mute is applied to the input gain.

Procedure:

1. Press [I/⏻] button to turn the set OFF.
2. Press [I/⏻] button together with [FUNCTION] button, and the power is turned on, the display of fluorescent indicator tube changes to “MD” or “VIDEO 1” instantaneously, and thus the FUNCTION is changed over.

Change-over of AM Tuner Step between 9kHz and 10kHz

• A step of AM channels can be changed over between 9kHz and 10kHz.

Procedure:

1. Press [I/⏻] button to turn the set ON.
2. Select the function “TUNER”, and press [TUNER/BAND] button to select the BAND “MW”.
3. Press [I/⏻] button to turn the set OFF.
4. Press [ENTER/NEXT] and [I/⏻] buttons simultaneously, and the display of fluorescent indicator tube changes to “MW step 10” or “MW step 9”, and thus the channel step is changed over.

LED and Fluorescent Indicator Tube All Lit, Key Check Mode (Do not connect the HTC-VX500.)

Procedure:

1. Press I/⏻ button to turn the set ON.
2. Press the OPEN/CLOSE button to open the sliding panel.
3. Press three buttons DELAY , ENTER/NEXT , and DISPLAY/DEMO simultaneously.
4. LEDs and fluorescent indicator tube are all turned on. Each time the MOVIE button is pressed, the fluorescent indicator tube lights up as follows:
   lights up completely → lights up partially 1 → lights up partially 2 → lights up completely.
5. Press GAME button, and the key check mode is activated.
6. In the key check mode, the fluorescent indicator tube displays “K @@ V0 J0”. Each time a button is pressed, “K”value decreases. However, once a button is pressed, it is no longer taken into account. (@@ means the total of buttons)
   “J” Value increases like 1, 2, 3 ... if rotating JOG knob in “+” direction, or it decreases like 0, 9, 8 ... if rotating in “-” direction.
   “V” Value increases like 1, 2, 3 ... if rotating VOLUME knob in “+” direction, or it decreases like 0, 9, 8 ... if rotating in “-” direction.
7. Pressing all buttons lights up the fluorescent indicator tube completely.
8. To exit from this mode, press three buttons EDIT , ENTER/NEXT and DISPLAY/DEMO simultaneously. (COLD RESET)
9. To exit from this mode, press three buttons in the same manner as step 1, or disconnect the power cord.

CD, TAPE Deck Aging Mode (This mode can be used only when the HTC-VX500 is connected.)

This mode can be used for checking the operations of the CD player and tape deck.

- When problems occur;
  Aging stops, and the stopped state is displayed on the fluorescent indicator tube.
- When no problems;
  Aging continues.

Preparations:

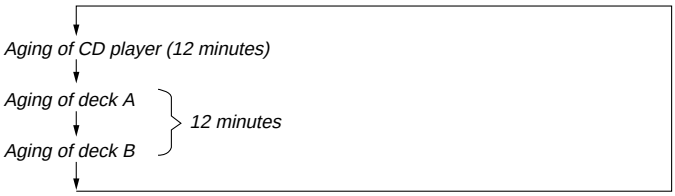
- Set the CD on the DISC1 tray.
- Insert a commercially available tape for recording (tapes which contents can be erased, etc.) in decks A and B.

Setting the aging mode:

Press the PLAY MODE button, ENTER/NEXT button, and STEREO/MONO button together.
When the aging mode is set, the CD roulette mark blinks. To exit the mode, press the I/⏻ button and turn OFF the power.

Sequence:

The aging mode is executed in the following sequence.
If the function is set to “CD” when the aging mode is set, aging is performed starting from the CD player. When set to “TAPE A” or “TAPE B”, aging is started from deck A.
If the function is set to others, aging will not be started until the function is switched to CD or TAPE.



Display of status:

- The aging status is displayed on the fluorescent indicator tube.
- Normally, the CD player displays the remaining aging time. But if operations ended abnormally, it displays the cause.
- During the aging of the tape deck, the operations performed will be displayed. If operations ended abnormally, this will be displayed at the fluorescent display tube.

CD Player

- During normal operations:
  Display of fluorescent indicator tube

**1-@@

**: Displays “CD” and the remaining aging time (minutes) alternately. The remaining aging time is counted down from 12.

@@: Track number being accessed.

• When operations end abnormally:

Display of fluorescent display tube

Display	Main Cause
NO DISC ERR	DISC 1 is NO DISC from the beginning
FOCUS1 ERR	Focus is not imposed properly
FOCUS2 ERR	The focus deviated several times after the disc rotated normally
GFS ERR	GFS ERROR
FBIAS ERR	Error during focus bias adjustment
SENSOR ERR	DISC 1 was found to be NO DISC by the disc sensor
TABLE ERR	The table did not rotate normally
TRAY ERR	The tray containing the BD did not operate normally

Tape Deck

Display of Operations	Operation	Timing of Ending
TAPE A AG-1	TAPE A REW	Shutoff
TAPE A AG-2	TAPE A FWD	2 minute playback
TAPE A AG-3	TAPE A FF	20 seconds or shutoff
TAPE A AG-4	TAPE A REV	2 minutes playback
TAPE A AG-5	TAPE A REW	Shutoff
TAPE B AG-1	TAPE B REW	Shutoff
TAPE B AG-2	TAPE B FWD	2 minute playback
TAPE B AG-3	TAPE B FF	20 seconds or shutoff
TAPE B AG-4	TAPE B REV	2 minute playback
TAPE B AG-5	TAPE B REW	Shutoff

Operations during aging

• Operations are performed in the following sequence during aging.

<CD player>

1. The CD tray rotates and disc 1 is selected.
2. Chucking is performed.
3. TOC is read.
4. Track 1 played back for 2 seconds.
5. The last track is played back for 2 seconds.
6. 1 to 5 is repeated.
7. After 12 minutes of aging, aging is switched to the tape deck.

<Tape Deck>

1. The tape in deck A is rewound to the head.
2. The FWD side is played back for 2 minutes.
3. The tape is fast forwarded (FF) for 20 seconds. The following procedure is performed when the tape end is reached before the 20 seconds.
4. The REV side is played back for 2 minutes.
5. The tape is rewound to the head (REW).
6. The tape in deck B is rewound to the head.
7. The FWD side is played back for 2 minutes.
8. The tape is fast forwarded (FF) for 20 seconds. The following procedure is performed when the tape end is reached before the 20 seconds.
9. The REV side is played back for 2 minutes.
10. The tape is rewound to the head (REW).
11. Aging is switched to the CD player.

PANEL Aging Mode

This mode is used for opening and closing the sliding panel continuously.

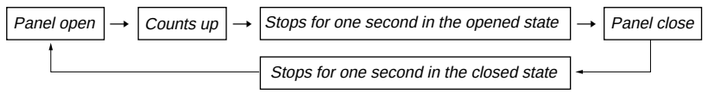
Setting the aging mode :

With the set at standby condition, press FLASH button, ENTER/NEXT button and STEREO/MONO button together.
The aging will start and sliding panel will follow aging sequence as described below.

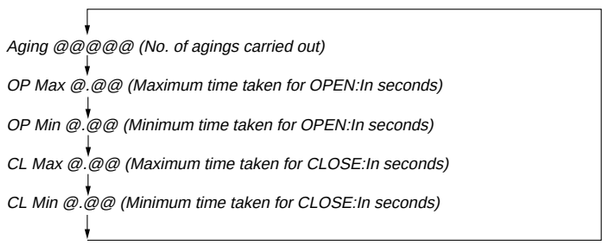
- When problems occur ;
  Aging stops and “AGING ERROR” is displayed on the fluorescent indicator tube.

- When no problems;
  Aging is carried out repeatedly. After 65000 times, “AGING STOP” is displayed and aging stops.

Aging Sequence

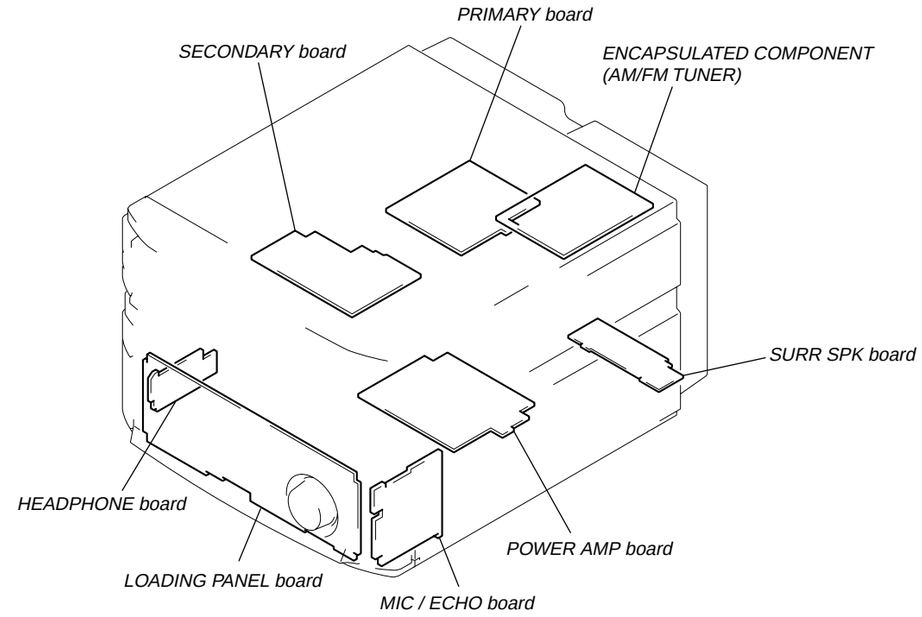


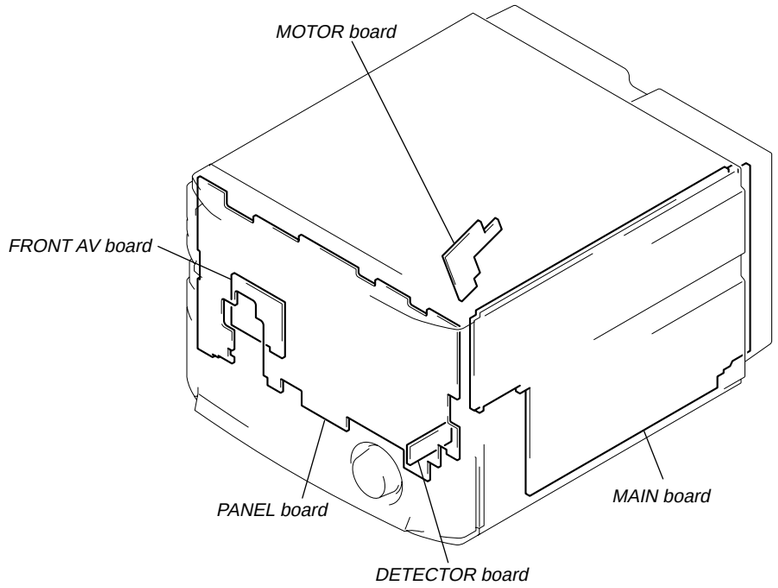
Each time the DISPLAY/DEMO button is pressed, the display switches as follows.


Aging @@@@@ (No. of agings carried out)
OP Max @.@@ (Maximum time taken for OPEN:In seconds)
OP Min @.@@ (Minimum time taken for OPEN:In seconds)
CL Max @.@@ (Maximum time taken for CLOSE:In seconds)
CL Min @.@@ (Minimum time taken for CLOSE:In seconds)

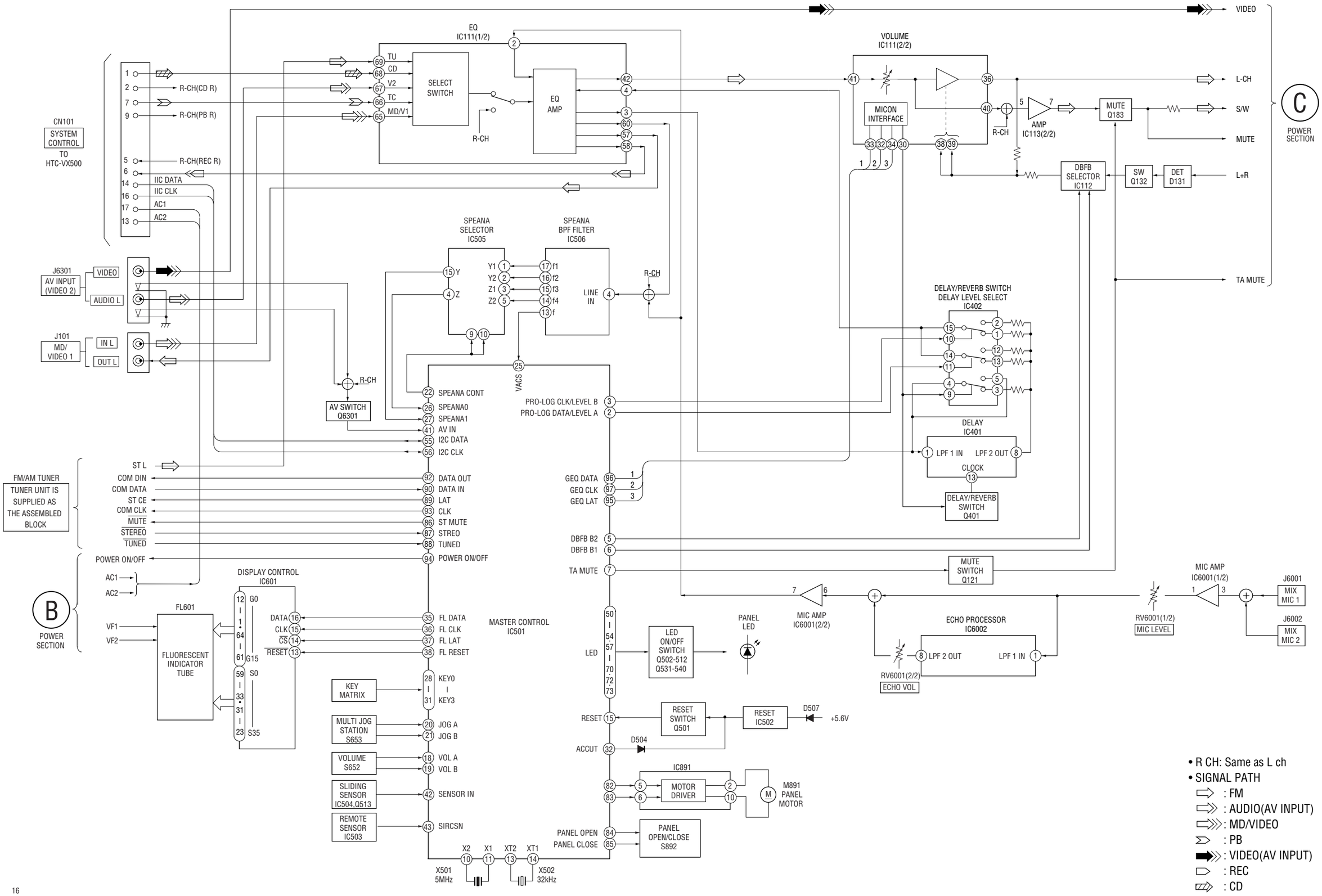
SECTION 4
DIAGRAMS

4-1. CIRCUIT BOARDS LOCATION



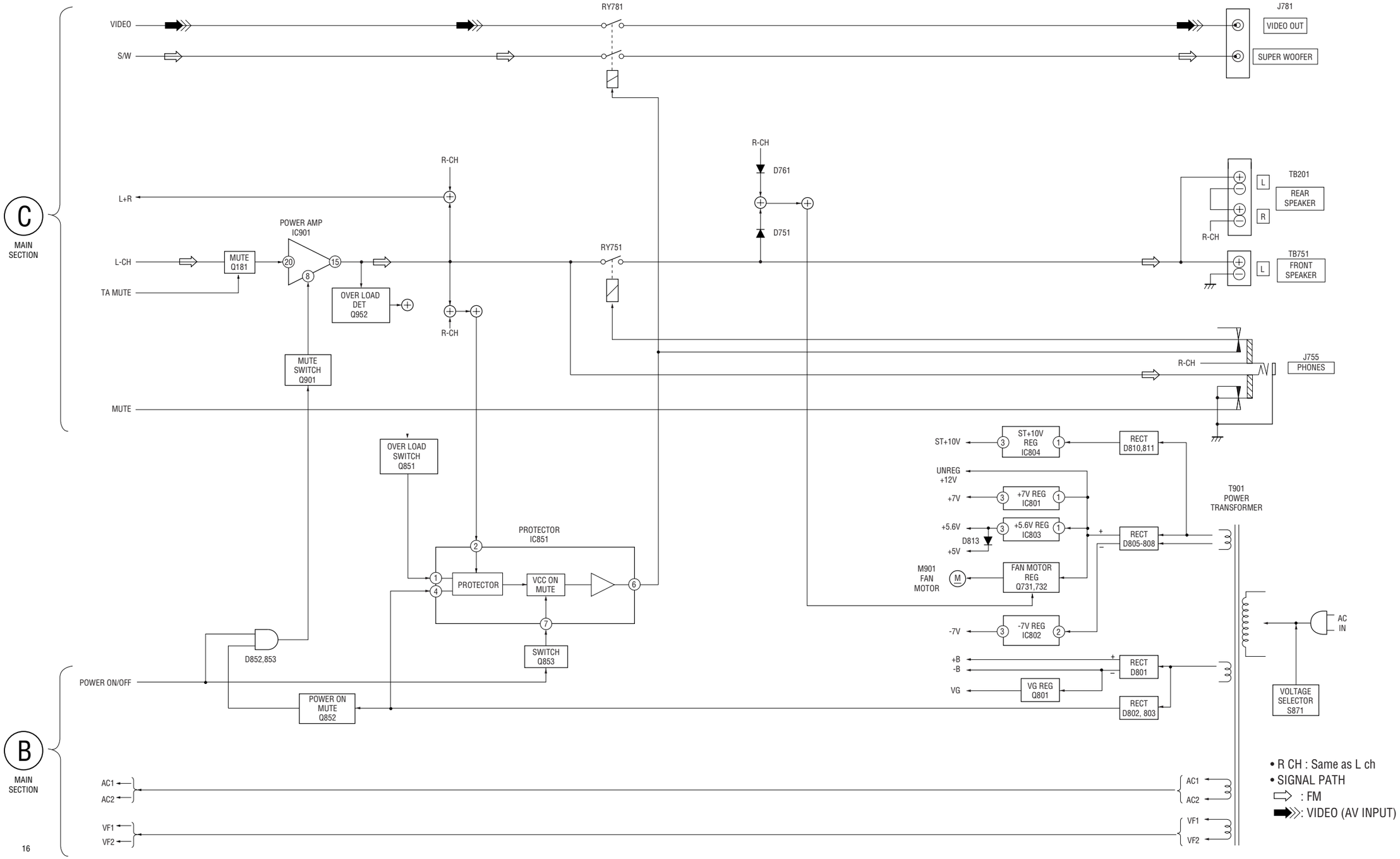


4-2. BLOCK DIAGRAMS
MAIN SECTION



- R CH: Same as L ch
- SIGNAL PATH
  - : FM
  - : AUDIO(AV INPUT)
  - : MD/VIDEO
  - : PB
  - : VIDEO(AV INPUT)
  - : REC
  - : CD

POWER SECTION



THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

For schematic diagrams.

Note:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- : nonflammable resistor.
- : fusible resistor.
- : panel designation.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

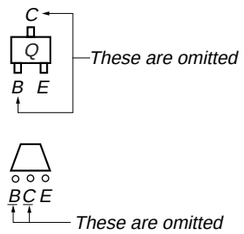
- B+ : B+ Line.
- B– : B– Line.
- : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  - : FM
  - : AM
  - : AUDIO (AV INPUT)
  - : MD/VIDEO
  - : VIDEO (AV INPUT)
  - : PB (DECK A)
  - : REC (DECK B)
  - : CD
- Abbreviation
  - HK : Hong Kong model
  - SP : Singapore model
  - MY : Malaysia model
  - IA : Indonesia model
  - EA : Saudi Arabia model

For printed wiring boards.

Note:

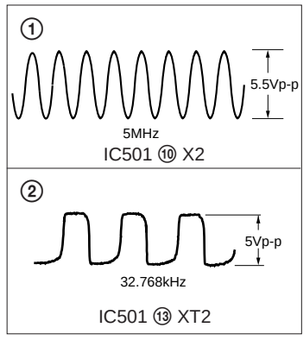
- : parts extracted from the component side.
- : parts extracted from the conductor side.
- ■ : parts mounted on the conductor side.
- ○ : Through hole.
- △ : internal component.
- : Pattern from the side which enables seeing.

- **Indication of transistor**



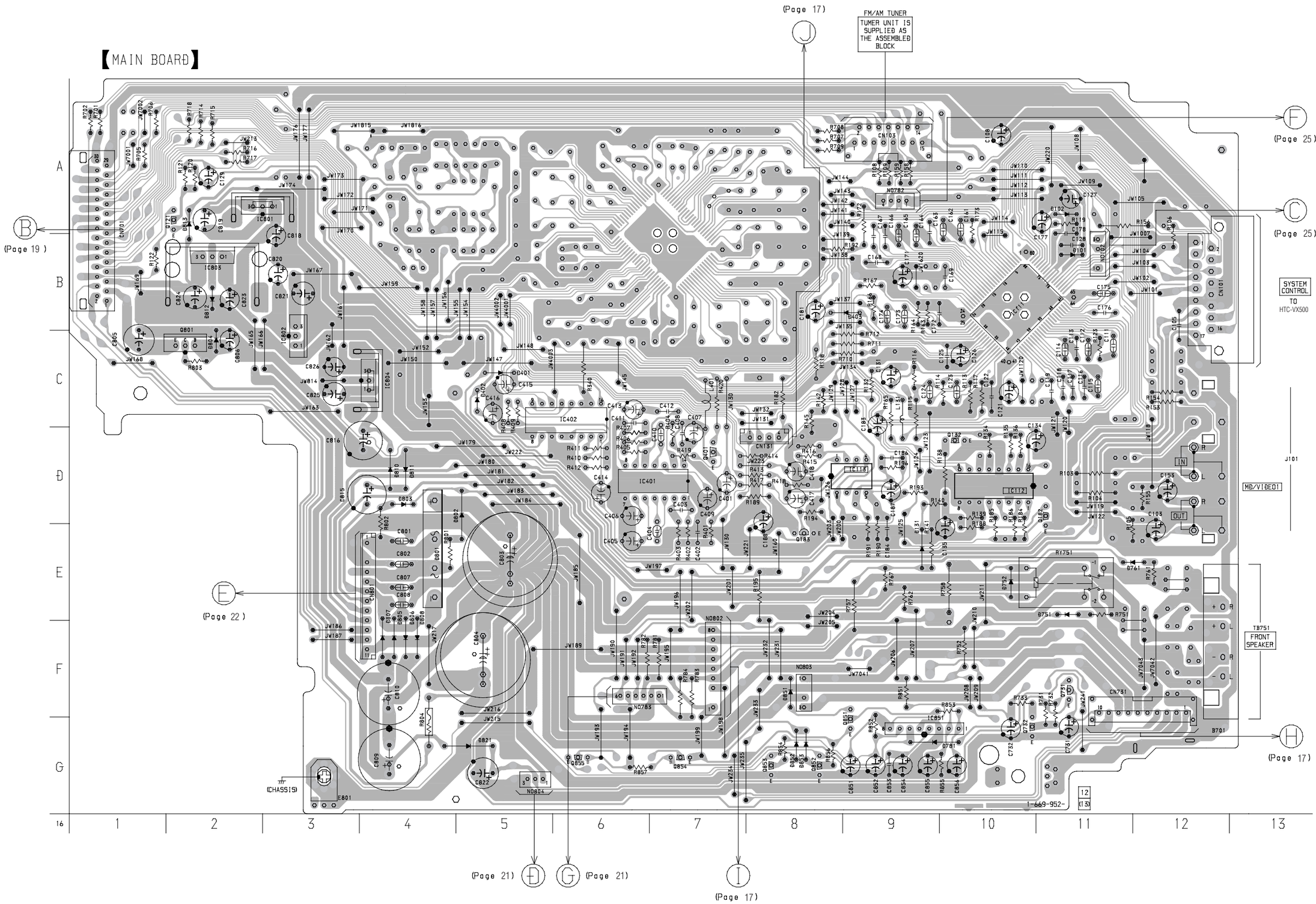
- **Waveforms**

DISPLAY Section



4-3. PRINTED WIRING BOARD MAIN SECTION

• Refer to page 9 for Circuit Boards Location.

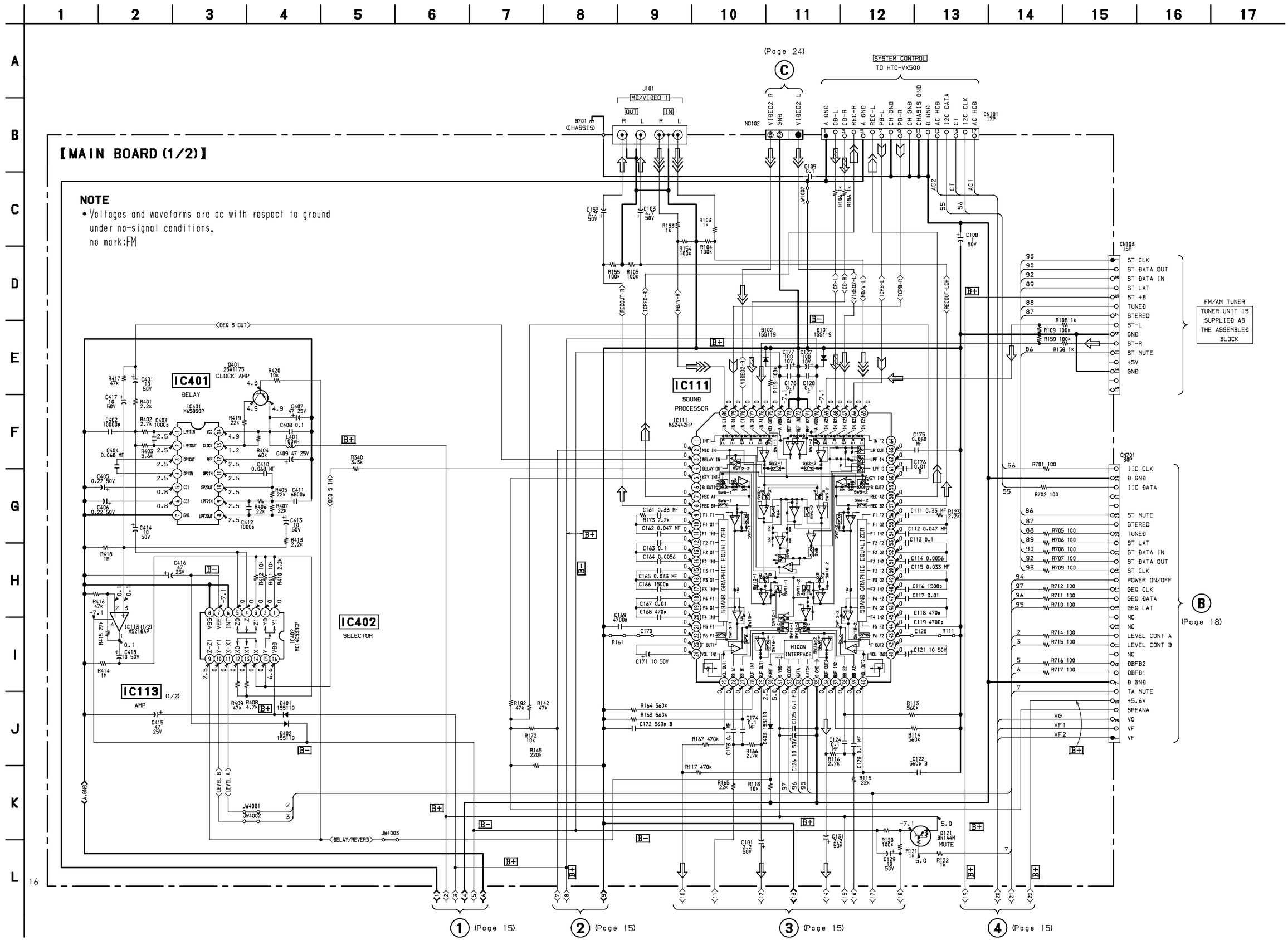


• **Semiconductor Location**

Ref. No.	Location
D101	B-11
D102	B-11
D131	E-9
D401	D-5
D402	D-5
D403	C-9
D751	F-11
D752	E-10
D761	E-12
D781	G-10
D801	E-4
D802	F-5
D803	E-4
D804	C-2
D805	F-4
D806	F-4
D807	F-4
D808	F-4
D810	E-4
D811	E-4
D812	C-2
D813	B-2
D851	F-8
D852	G-8
D853	G-8
IC111	C-10
IC112	E-10
IC113	E-9
IC401	E-7
IC402	D-6
IC801	B-2
IC802	C-3
IC803	B-2
IC804	D-4
IC851	G-9
Q121	B-2
Q132	D-10
Q182	E-11
Q183	E-8
Q401	D-7
Q731	G-11
Q732	G-10
Q801	C-2
Q851	G-9
Q852	H-8
Q853	H-8
Q854	G-7
Q855	G-6

4-4. SCHEMATIC DIAGRAM MAIN (1/2) SECTION

• Refer to page 27 for IC Block Diagrams.



4-5. SCHEMATIC DIAGRAM MAIN (2/2) SECTION

• Refer to page 13 for Printed Wiring Board.
• Refer to page 27 for IC Block Diagrams.

【MAIN BOARD (2/2)】

NOTE

• Voltages and waveforms are dc with respect to ground under no-signal conditions.
no mark:FM

IC113 (2/2) AMP

IC112 MC14052BCP ØBFB SELECTOR

Q182 2SC2603 BUFFER

Q183 2SC3623A MUTE

Q132 2SC2603 BUFFER

IC804 +10V REG

IC803 +5.6V REG

IC802 -7V REG

IC801 +7V REG

IC851 PROTECTOR

Q801 -30V REG

Q801 2SB1094

Q851 OVER LOAD SWITCH

Q852 BTC124ES POWER ON MUTE

Q853 BTC124ES PROTECT SWITCH

Q854 BN1F4M

Q855 2SC2958L RELAY SWITCH

Q732 REG CONTROL SWITCH

Q731 2SB1116A MOTOR REG

Q732 2SC2603

CN131 4P: TA MUTE, L IN, GND, R IN → J (Page 16)

NO802 7P: +7V, MUTE, L OUT, +B, GND, -B, R OUT, OVER CURRENT → I (Page 16)

NO804 3P: M GND, +12V UNREG, M GND ← D (Page 20)

CN801 11P: S GND, VF, VF, AC HTC, CT HCD, AC HTC, AC STR, AC STR, MAIN, GND, MAIN → E (Page 23)

NO782 4P: +7V, -7V, MIC, MIC GND → F (Page 24)

NO783 6P: MUTE, RLY IN, RLY OUT, R CH, HP GND, L CH → G (Page 20)

CN731 10P: RLY, S/W GND, S/W, +7V, S OUT/R, S OUT/L, C GND, C OUT, FAN GND, FAN → H (Page 16)

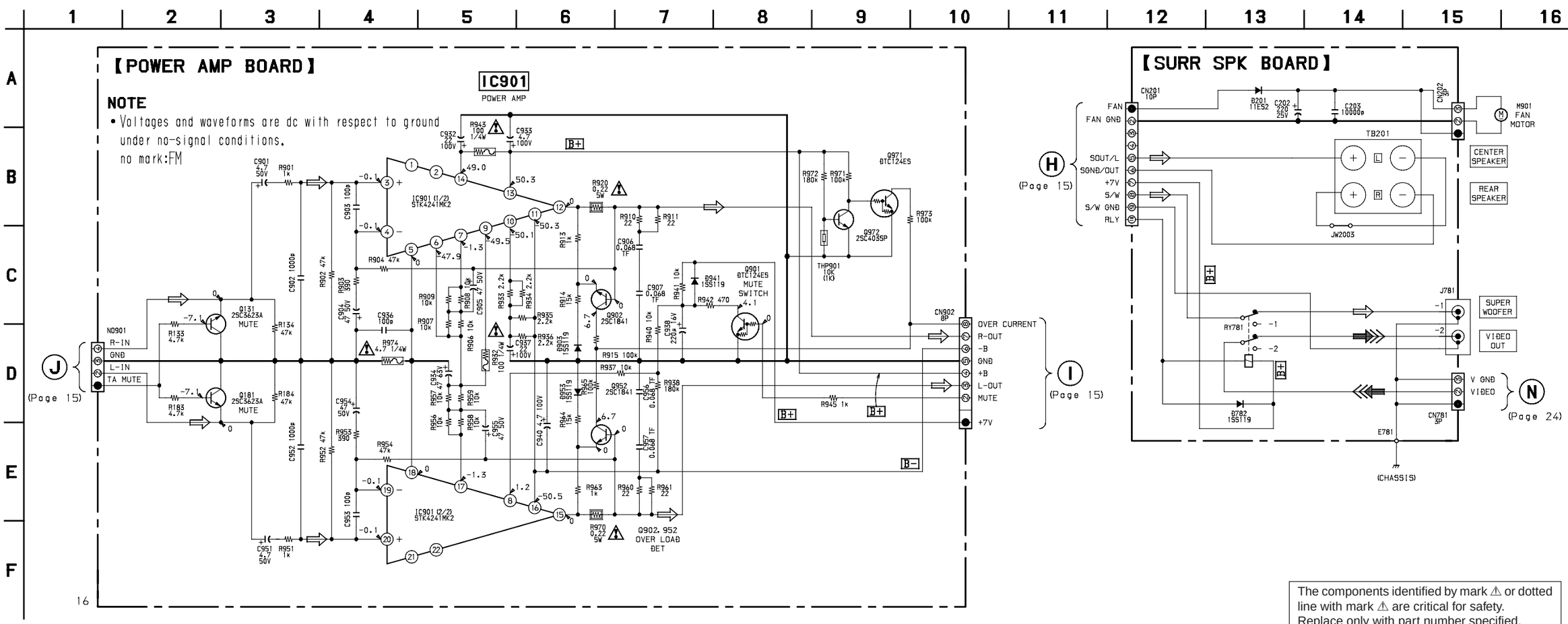
TB751 FRONT SPEAKER: L L R R

E801 (CHASSIS)

RY751

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

4-6. SCHEMATIC DIAGRAM POWER AMP SECTION

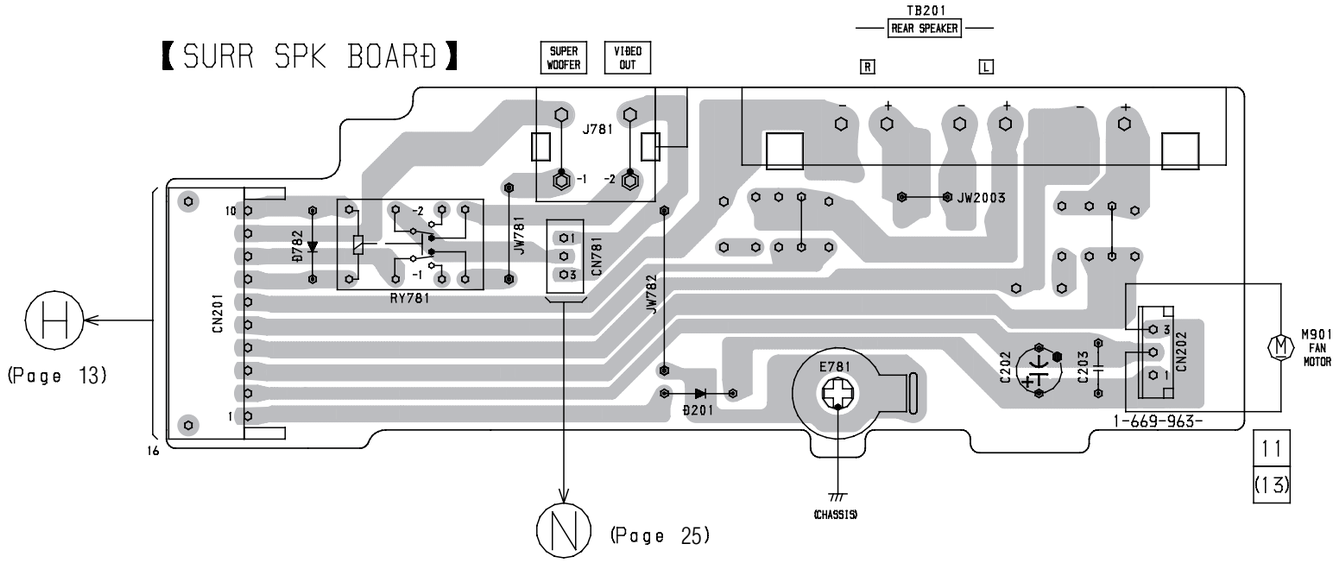


The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

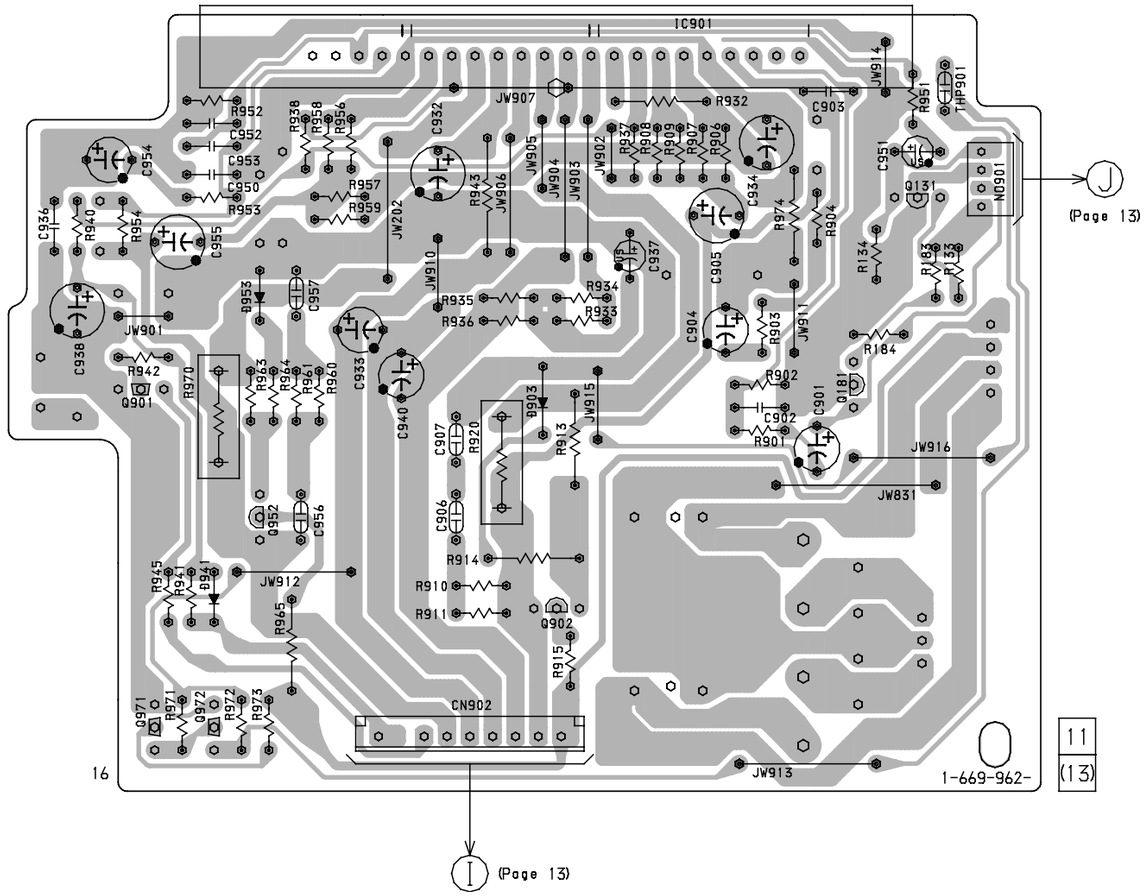
4-7. PRINTED WIRING BOARD POWER AMP SECTION

• Refer to page 9 for Circuit Boards Location.

【SURR SPK BOARD】

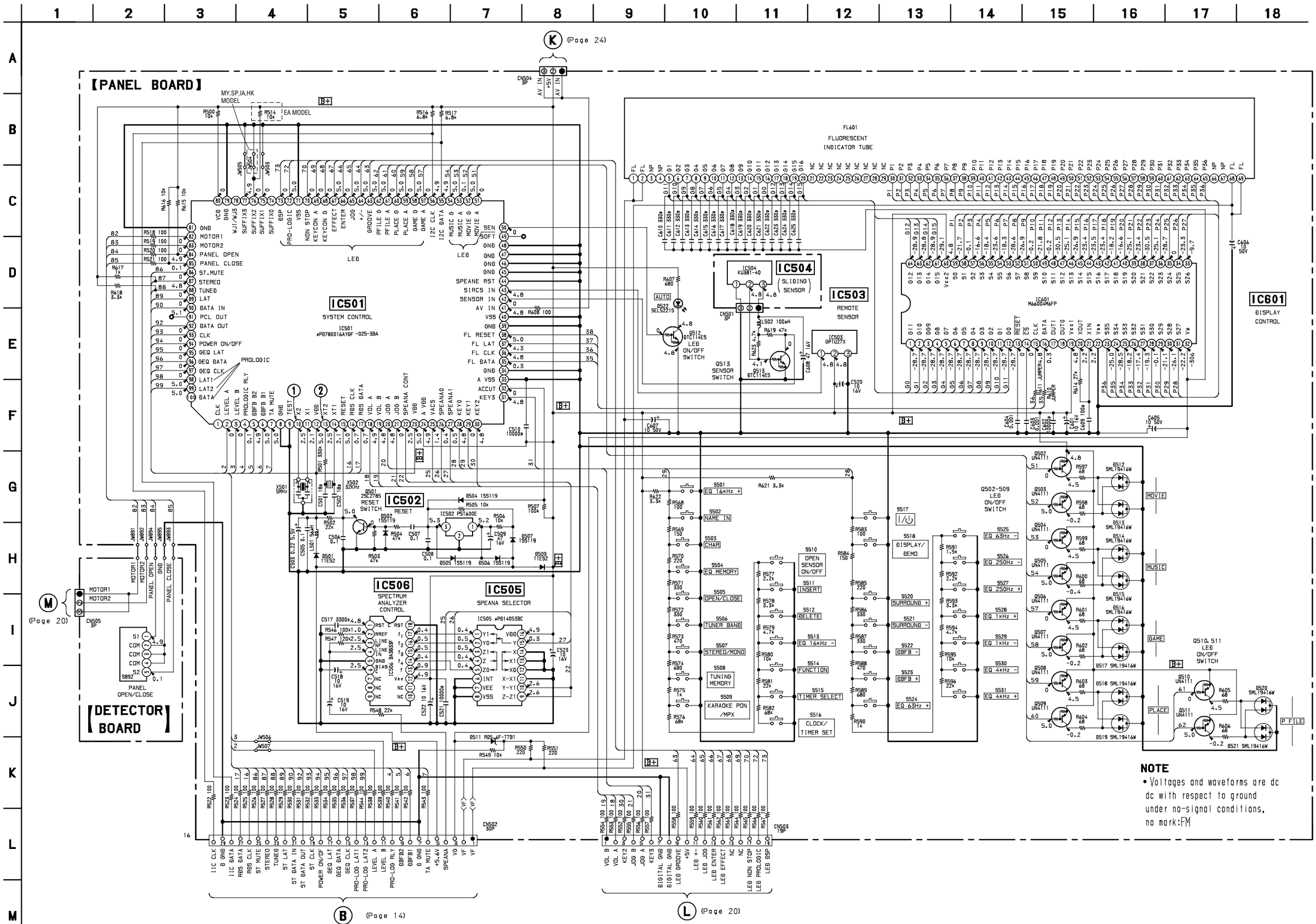


【POWER AMP BOARD】



4-8. SCHEMATIC DIAGRAM DISPLAY SECTION

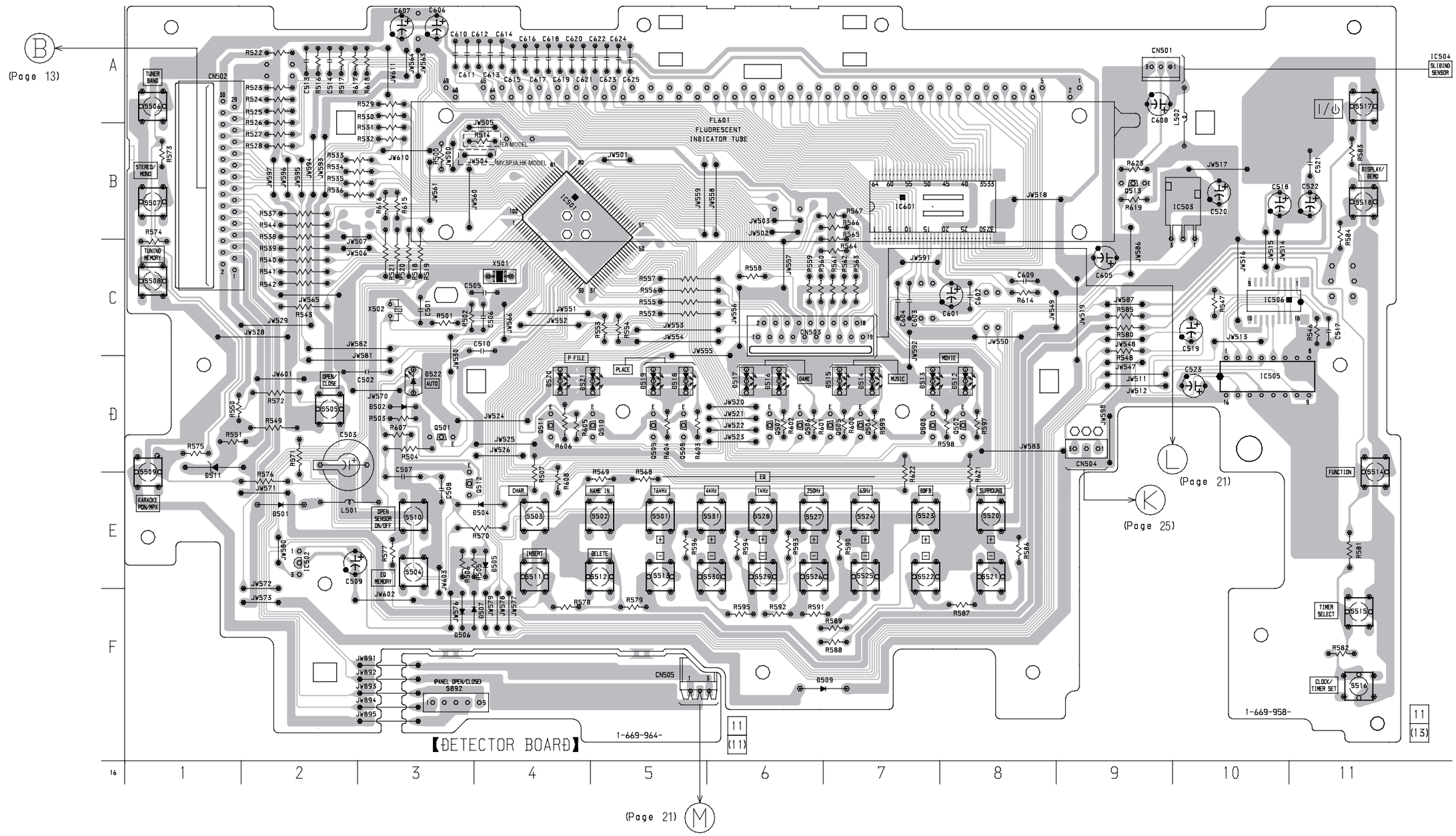
- Refer to page 28 for IC Block Diagrams.
- Refer to page 12 for Waveform.



4-9. PRINTED WIRING BOARD DISPLAY SECTION

• Refer to page 9 for Circuit Boards Location.

【PANEL BOARD】

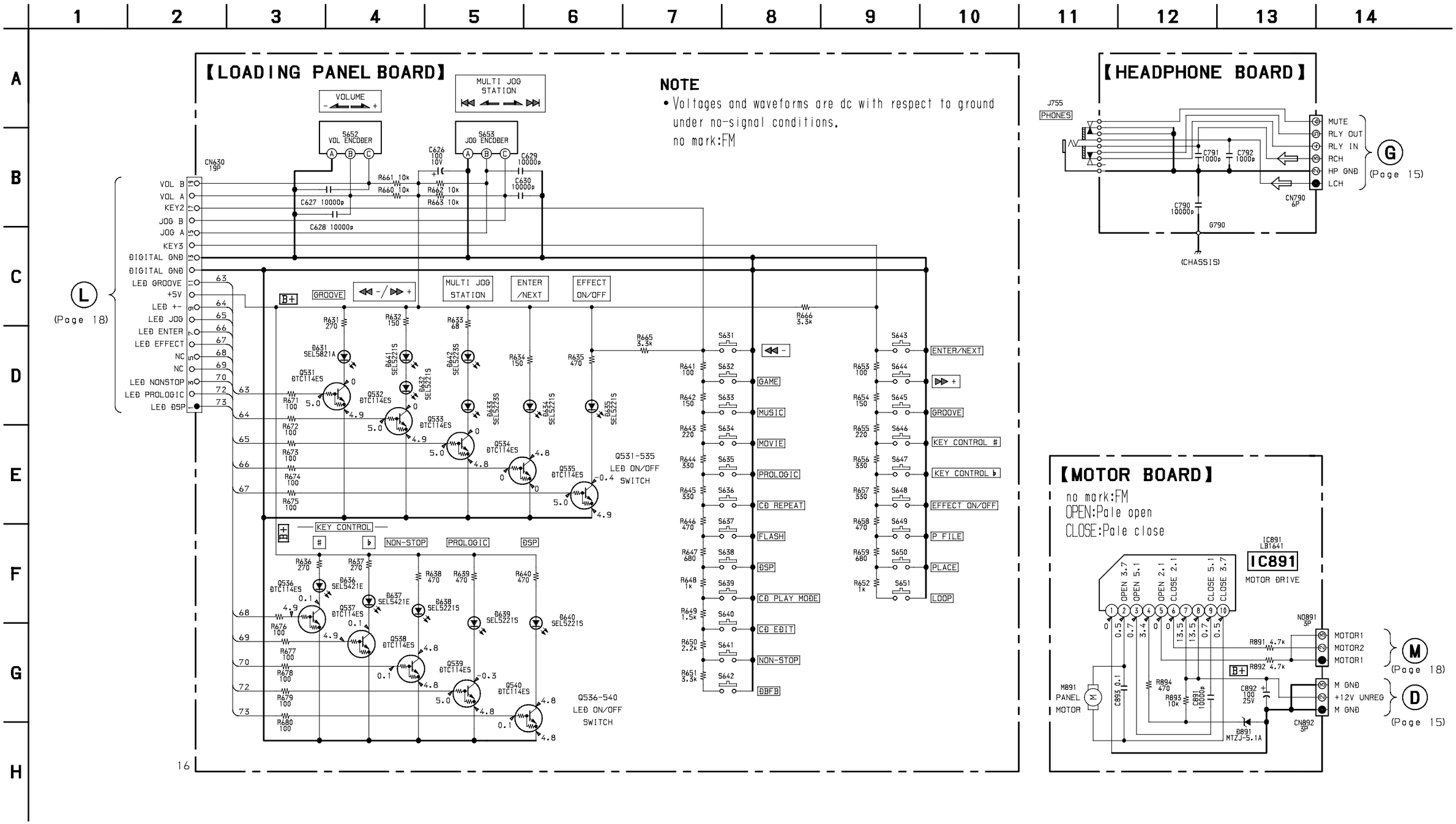


• **Semiconductor Location**

Ref. No.	Location
D501	E-2
D502	D-3
D504	E-4
D505	F-4
D506	F-3
D507	F-3
D509	F-6
D511	D-1
D512	D-8
D513	D-7
D514	D-7
D515	D-7
D516	D-6
D517	D-6
D518	D-5
D519	D-5
D520	D-4
D521	D-5
D522	D-3
IC501	B-4
IC502	E-2
IC503	B-10
IC505	D-10
IC506	C-10
IC601	B-7
Q501	D-3
Q502	D-8
Q503	D-7
Q505	D-7
Q504	D-7
Q506	D-6
Q507	D-6
Q508	D-5
Q509	D-5
Q510	D-5
Q511	D-4
Q512	E-3
Q513	B-9

4-10. SCHEMATIC DIAGRAM SLIDING PANEL SECTION

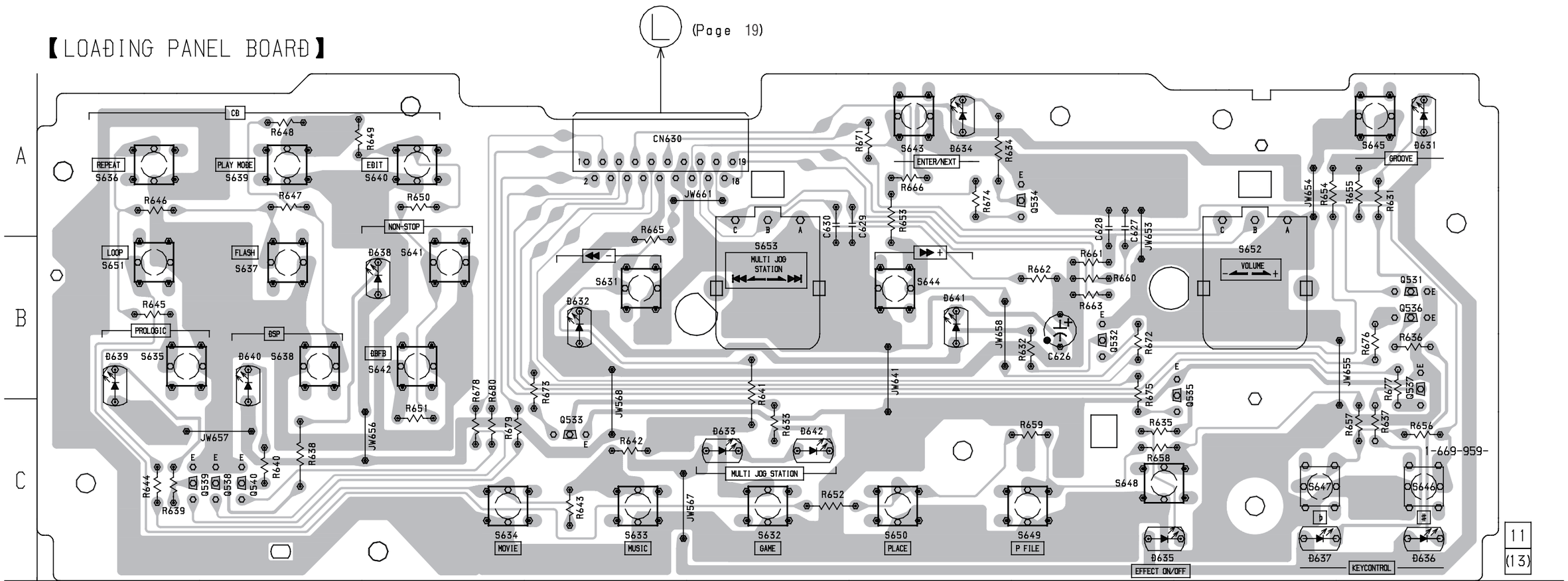
• Refer to page 28 for IC Block Diagrams.



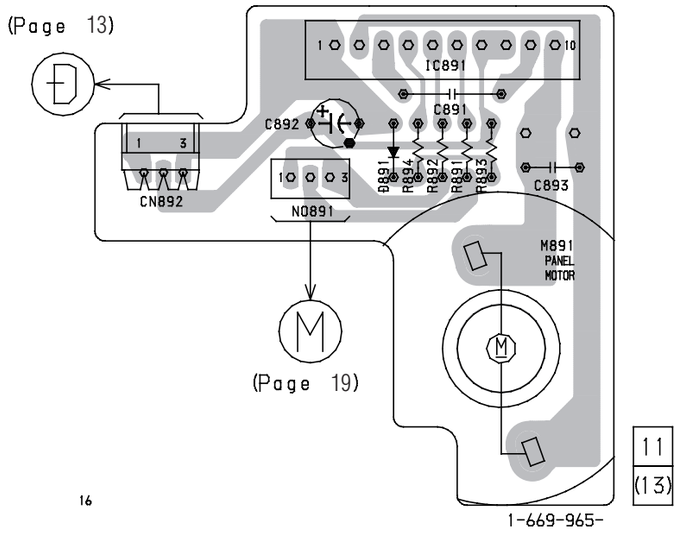
4-11. PRINTED WIRING BOARD SLIDING PANEL SECTION

• Refer to page 9 for Circuit Boards Location.

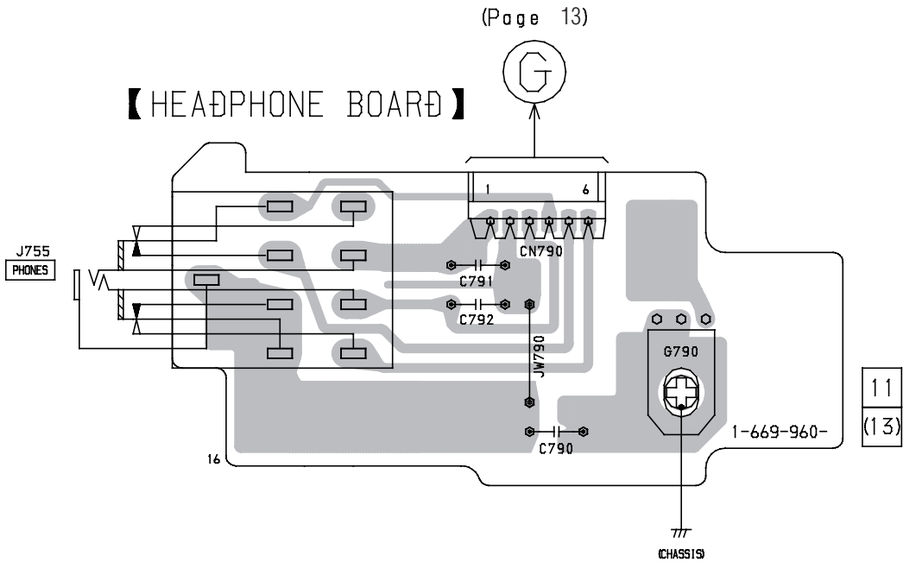
【LOADING PANEL BOARD】



【MOTOR BOARD】

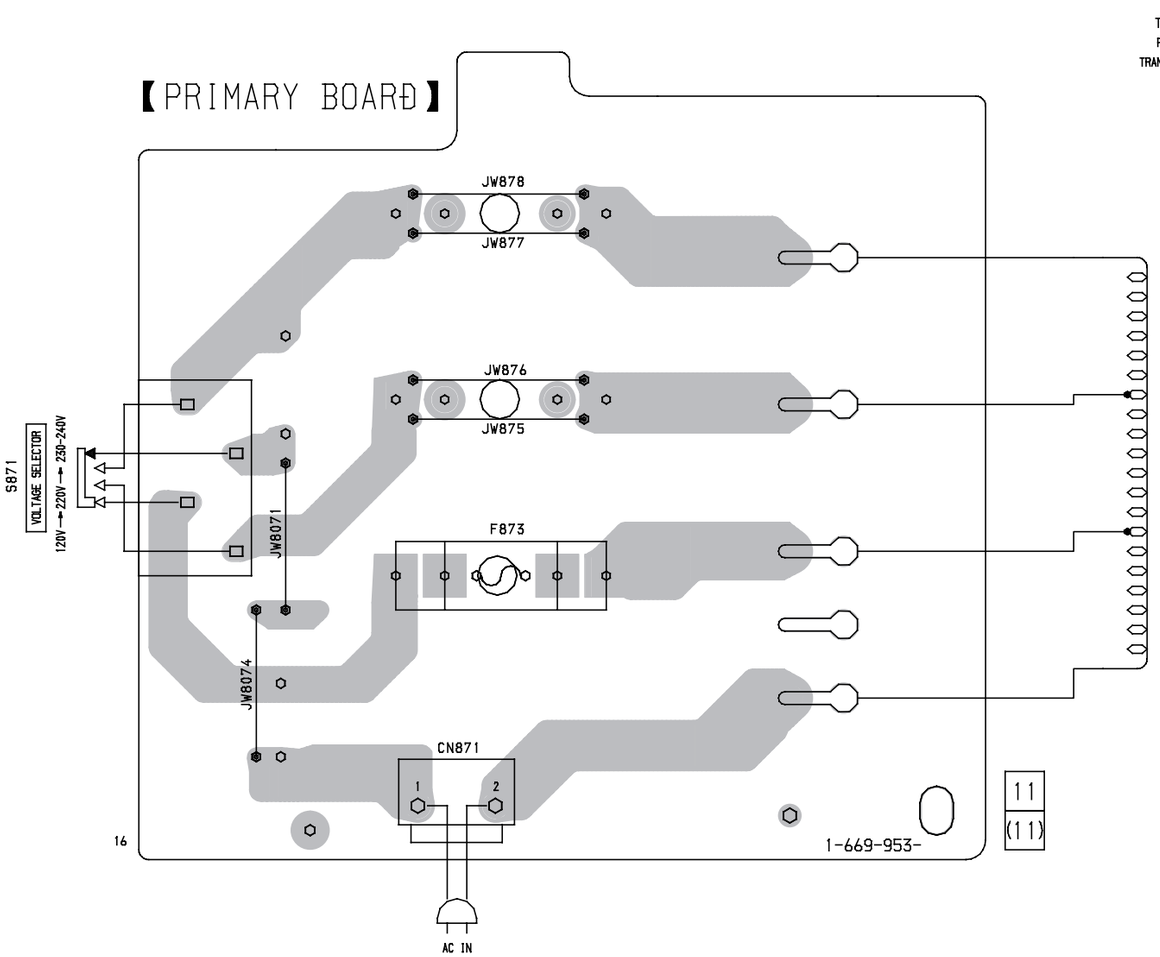


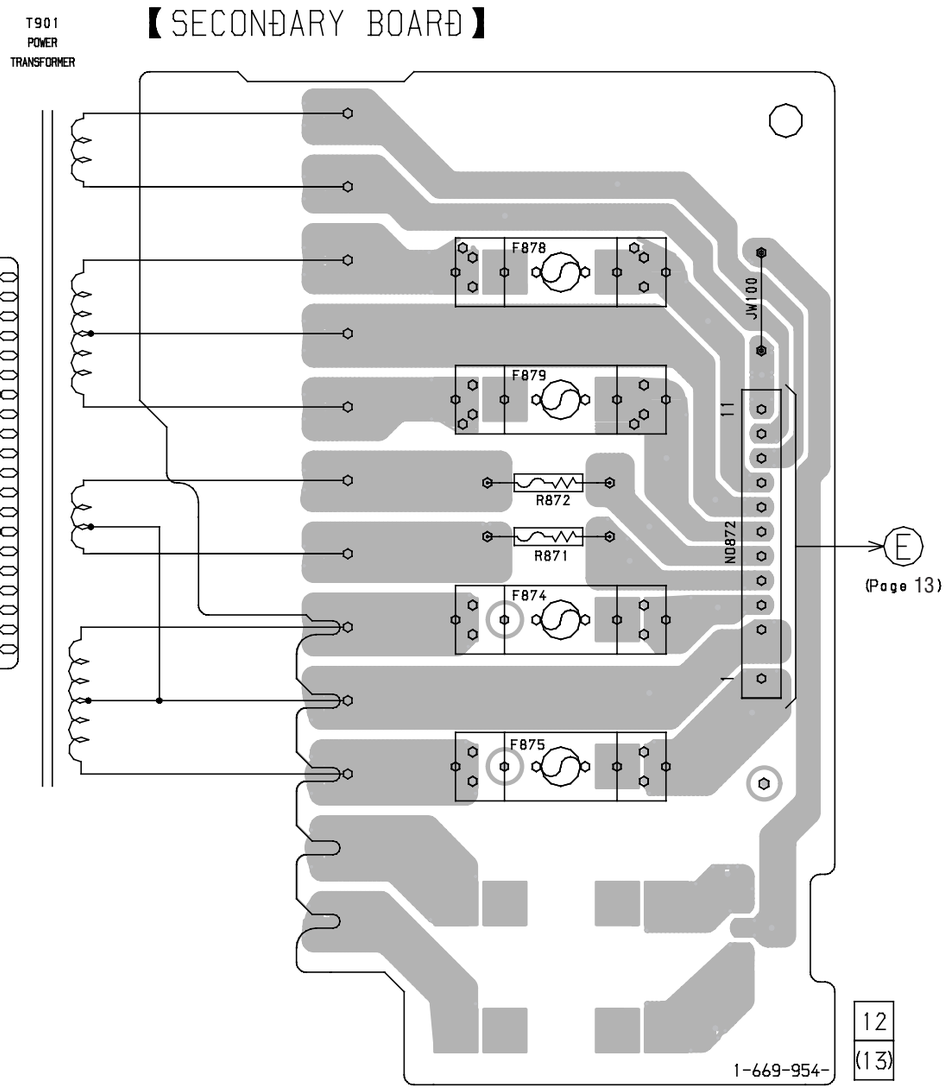
【HEADPHONE BOARD】



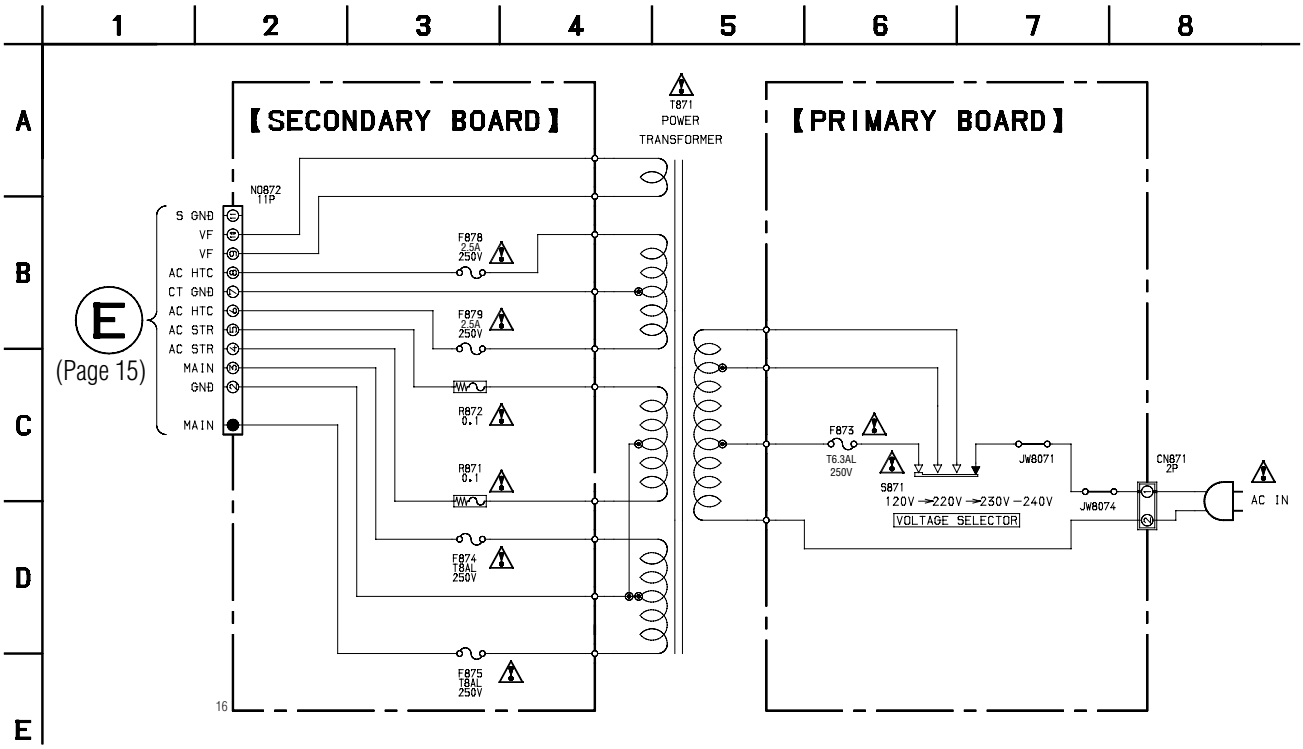
4-12. PRINTED WIRING BOARD TRANS SECTION

• Refer to page 9 for Circuit Boards Location.





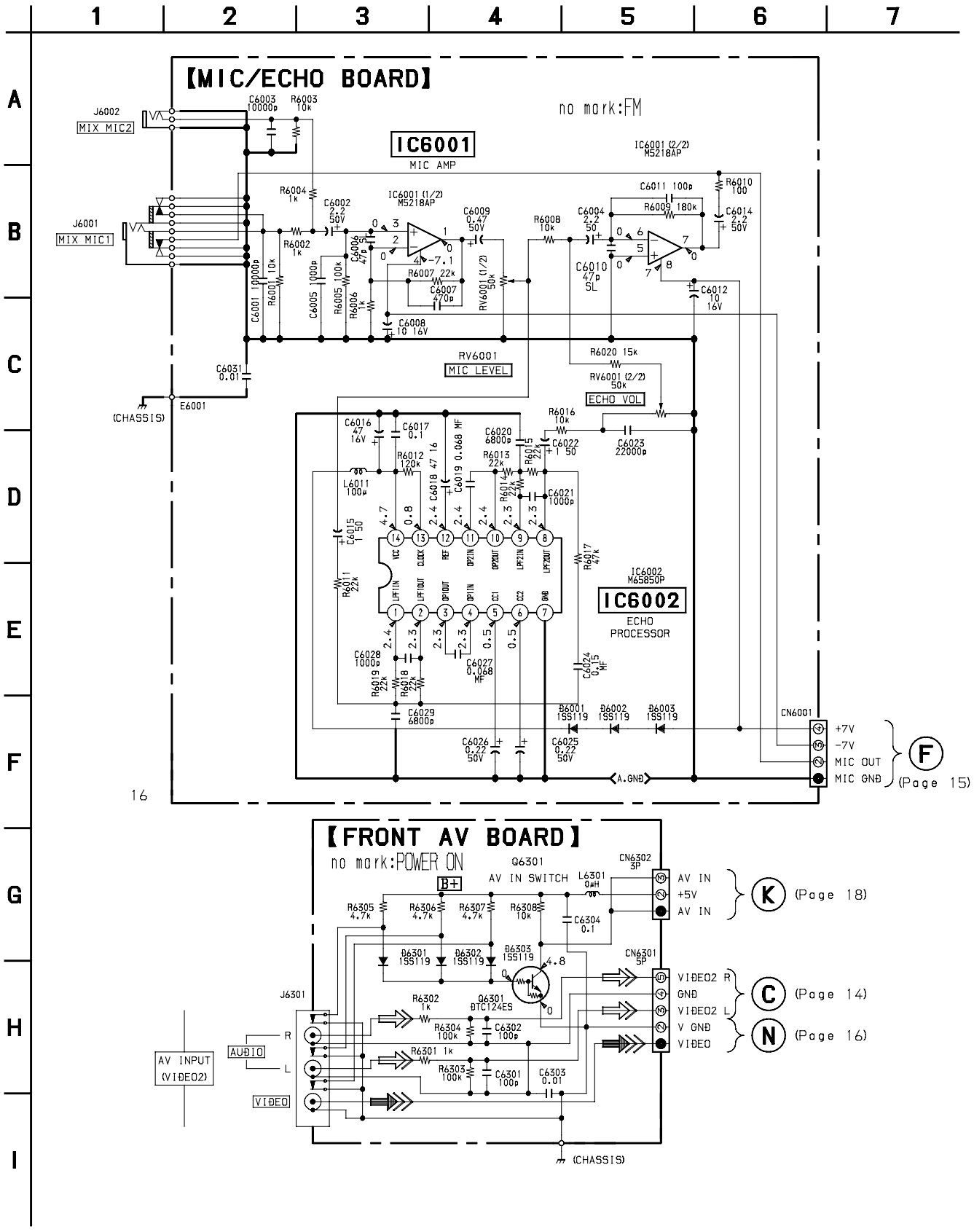
4-13. SCHEMATIC DIAGRAM TRANS SECTION



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

4-14. SCHEMATIC DIAGRAM AV/MIC SECTION

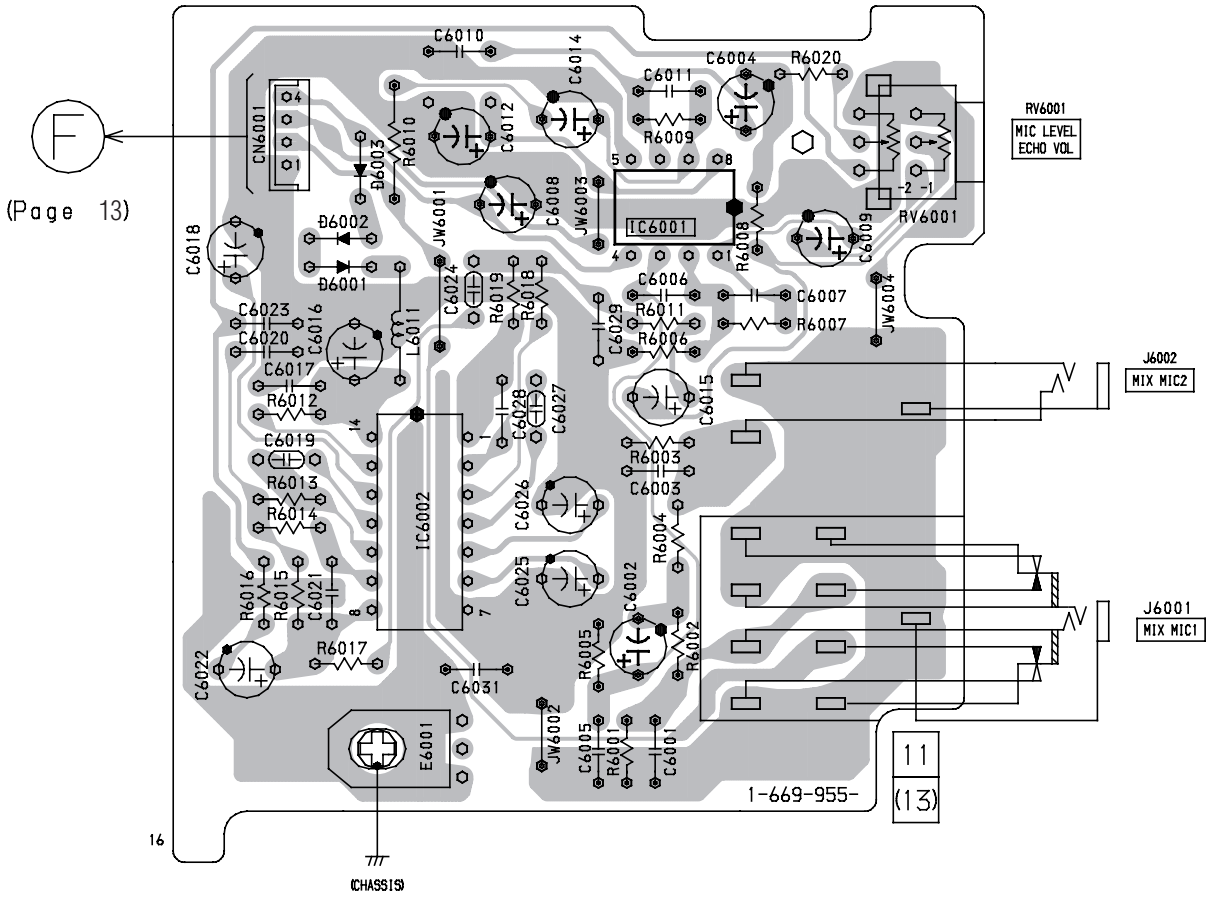
• Refer to page 28 for IC Block Diagrams.



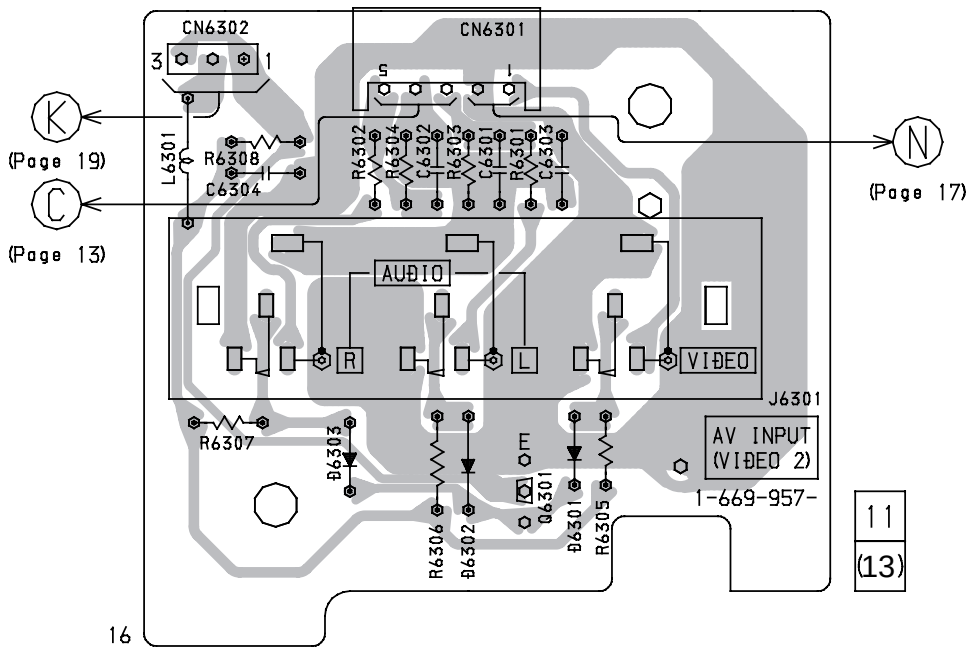
4-15. PRINTED WIRING BOARD AV/MIC SECTION

• Refer to page 9 for Circuit Boards Location.

【MIC/ECHO BOARÐ】



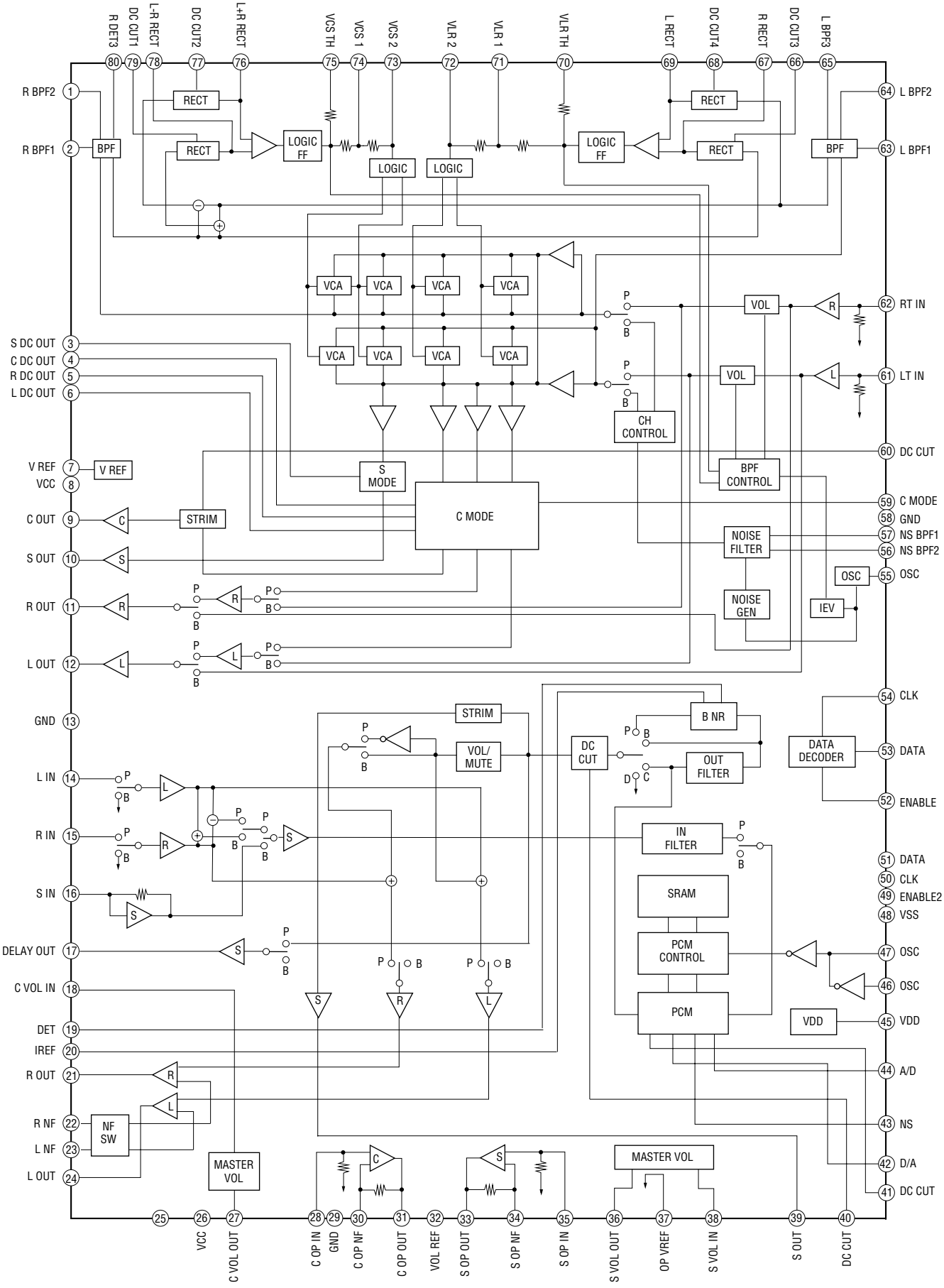
【FRONT AV BOARÐ】



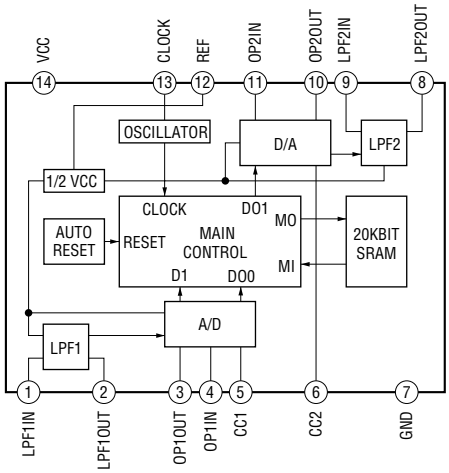
4-16. IC BLOCK DIAGRAMS

• MAIN BOARD

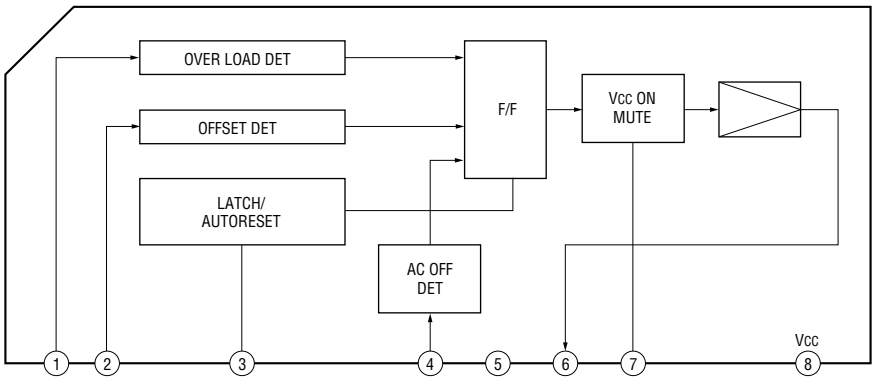
IC300 LV1041M



IC401 M65850P

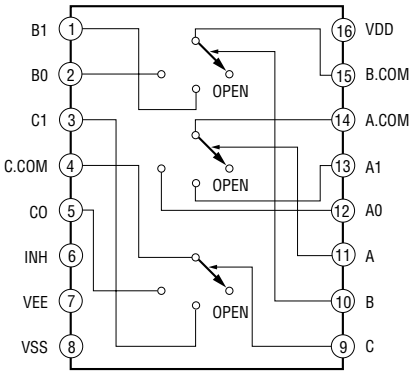


IC851 µPC1237HA

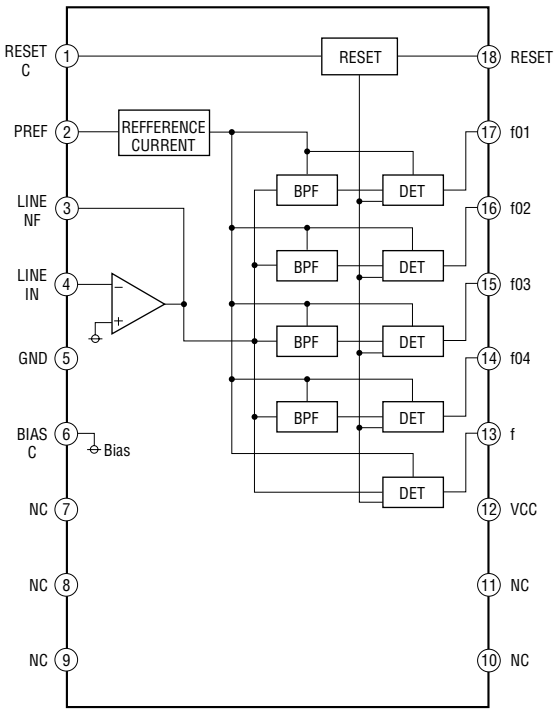


• PANEL BOARD

IC505 µPD4053BC

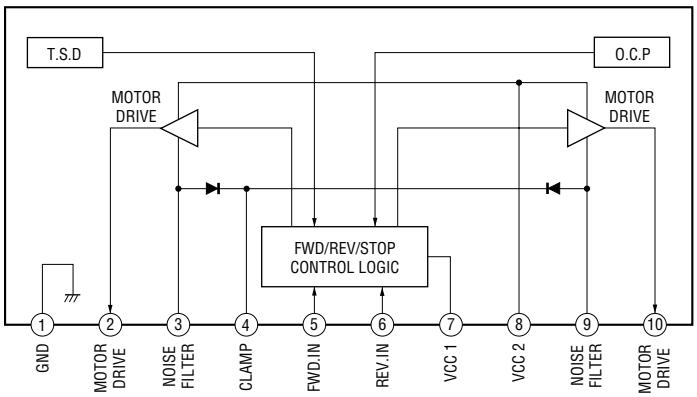


IC506 BA3833F-E2



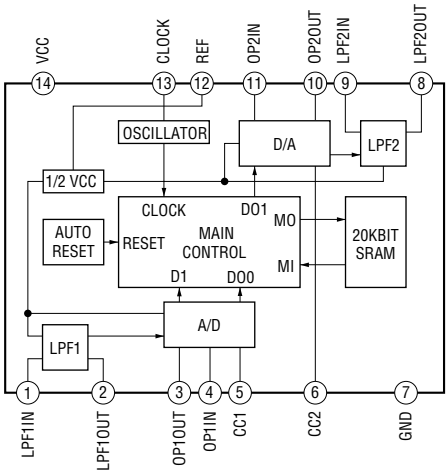
• MOTOR BOARD

IC891 LB1641



• MIC/ECHO BOARD

IC6002 M65850P



4-17. IC PIN FUNCTION

• IC501 SYSTEM CONTROL (uPD780016AYGF-025-3BA) (PANEL BOARD)

Pin No.	Pin Name	I/O	Description
1	CLK	—	Not used
2	LEVEL A	O	Surround level A signal output
3	LEVEL B	O	Surround level B signal output
4	PROLOGIC RLY	—	Not used
5	DBFB B2	O	DBFB level 2 signal output
6	DBFB B1	O	DBFB level 1 signal output
7	TA MUTE	O	Mute signal output
8	GND	—	Ground
9	TEST	—	Test terminal (Connected to ground)
10	X2	O	X' tal (5MHz)
11	X1	I	
12	VDD	—	Power supply (+5V)
13	XT2	O	X' tal (32kHz)
14	XT1	I	
15	RESET	I	Reset signal input
16	RDS CLK	I	RDS clock input
17	RDS DATA	I	RDS data input
18	VOL A	I	Rotary encoder (VOLUME) pulse input
19	VOL B	I	
20	JOG A	I	Rotary encoder (MULTI JOG STATION) pulse input
21	JOG B	I	
22	SPEANA CONT	O	Spectrum analyzer control output
23	VDD	—	Power supply (+5V)
24	A VDD	—	Analog power supply (+5V)
25	VACS	I	Audio input for VACS control
26	SPEANA0	I	Spectrum analyzer data input
27	SPEANA1	I	
28	KEY0	I	Key data input
29	KEY1	I	
30	KEY2	I	
31	KEY3	I	
32	ACCUT	I	Back up signal input
33	A VSS	—	Analog ground
34	GND	—	Ground
35	FL DATA	O	FL data output
36	FL CLK	O	FL clock output
37	FL LAT	O	FL latch output
38	FL RESET	O	FL reset output
39	GND	—	Ground
40	VSS	—	Ground

• Abbreviation
FL : Fluorescent indicator tube

Pin No.	Pin Name	I/O	Description
41	AV IN	I	AV INPUT (VIDEO 2) switch input
42	SENSOR IN	I	Sliding (panel) sensor signal input
43	SIRCS IN	I	Remote sensor signal input
44	SPEANE RST	O	Spectrum analyzer reset output
45	GND	—	Ground
46	GND	—	
47	GND	—	
48	GND	—	
49	SOFT	O	Soft test terminal
50	SEN	O	Audio indicator output
51	MOVIE A	O	LED driver output
52	MOVIE G	O	
53	MUSIC A	O	
54	MUSIC G	O	
55	I2C DATA	I/O	Serial data input/output
56	I2C CLK	I/O	Serial clock input/output
57	GAME A	O	LED driver output
58	GAME G	O	
59	PLACE A	O	
60	PLACE G	O	
61	PFILE A	O	
62	PFILE G	O	
63	GROOVE	O	
64	+/–	O	
65	JOG	O	
66	ENTER	O	
67	EFECT	O	
68	KEYCON G	—	Not used
69	KEYCON A	—	
70	NON STOP	O	LED driver output
71	VSS	—	Ground
72	DELAY	O	LED driver output
73	REVER B	O	
74	SUFFIX0	I	Destination terminal
75	SUFFIX1	I	
76	SUFFIX2	I	
77	SUFFIX3	I	
78	WJ1/WJ3	I	Model select terminal
79	GND	—	Ground
80	VCD	I	VCD select terminal “L”: NON-VCD (Connected to ground)

Pin No.	Pin Name	I/O	Description
81	GND	—	Ground
82	MOTOR1	O	Panel motor control output
83	MOTOR2	O	
84	PANEL OPEN	O	Panel open switch output
85	PANEL CLOSE	O	Panel close switch output
86	ST. MUTE	O	ST mute signal output
87	STEREO	I	Stereo detection input for tuner
88	TUNED	I	Tuner detection input for tuner
89	LAT	O	Tuner PLL latch output
90	DATA IN	I	Tuner PLL data input
91	PCL OUT	O	Sub clock output
92	DATA OUT	O	Tuner PLL data output
93	CLK	O	Tuner clock output
94	POWER ON/OFF	O	Power on/off control output
95	GEQ LAT	O	GEQ latch output
96	GEQ DATA	O	GEQ data output
97	GEQ CLK	O	GEQ clock output
98	LAT1	—	Not used
99	LAT2	—	
100	DATA	—	

• Abbreviation
GEQ : Graphic Equalizer
PLL : Phase Locked Loop

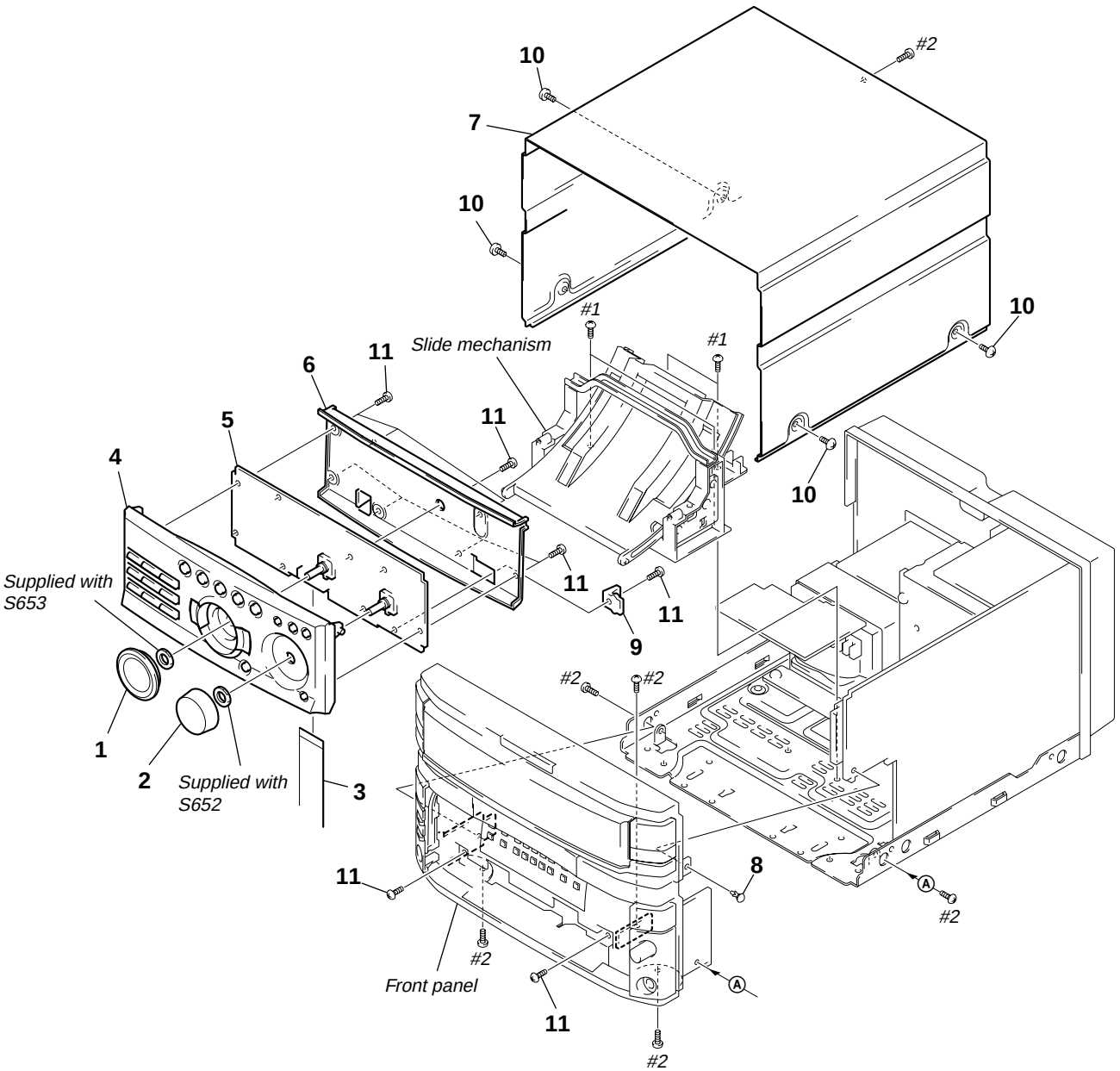
SECTION 5
EXPLODED VIEWS

NOTE:

- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.
- Abbrevation
  HK : Hong Kong model
  SP : Singapore model
  MY : Malaysia model
  IA : Indonesia model
  EA : Saudi Arabia model

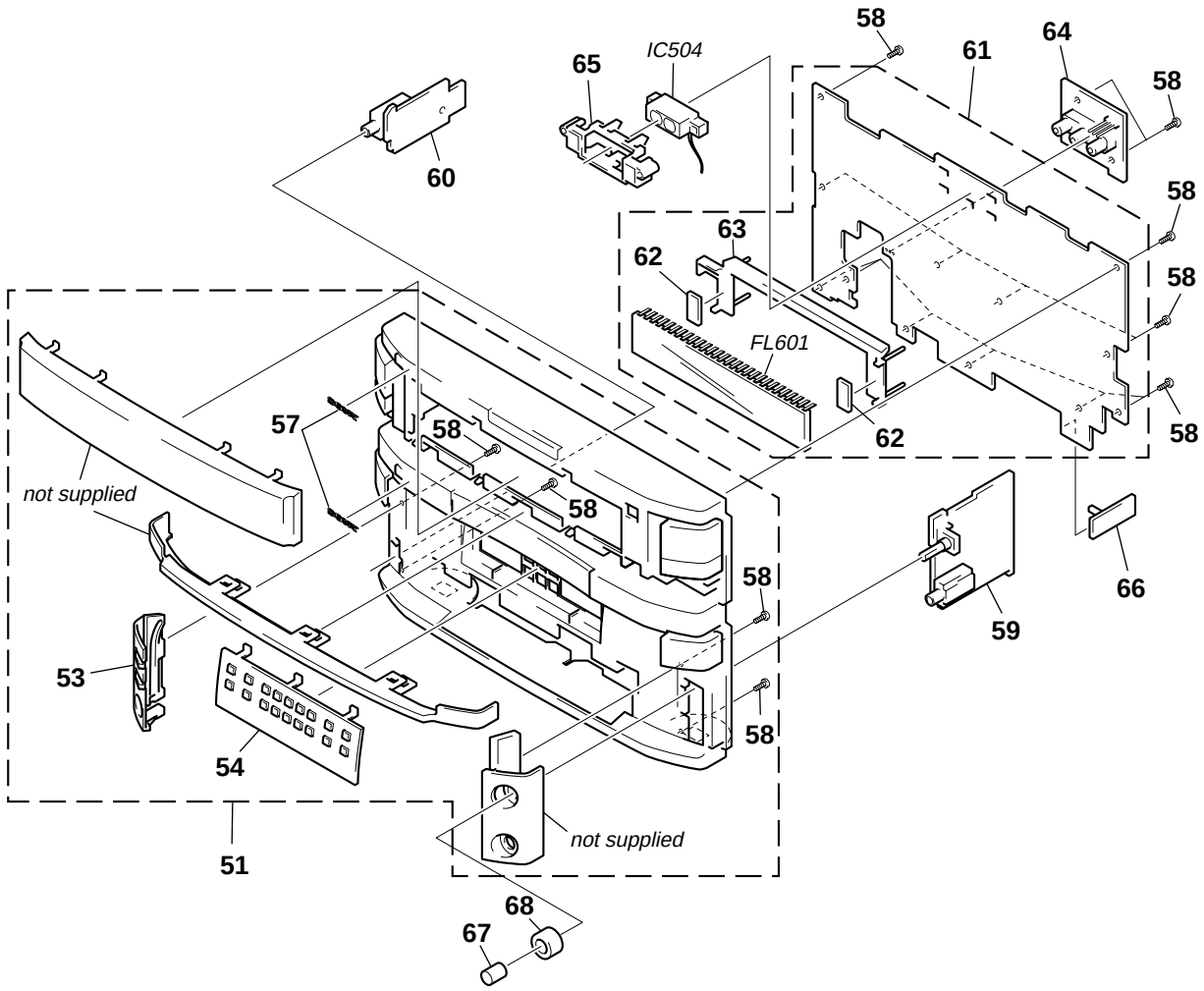
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

5-1. CASE AND SLIDING PANEL SECTION



Ref. No.	Part No.	Description	Remarks
1	4-219-918-01	KNOB (JOG)	
2	X-4951-659-1	KNOB (VOLUME) ASSY	
3	1-773-125-11	WIRE (FLAT TYPE) (19 CORE)	
4	X-4951-775-1	SLIDING PANEL SUB ASSY	
* 5	A-4414-709-A	LOADING PANEL BOARD, COMPLETE (EA,HK,MY,SP)	
* 5	A-4414-736-A	LOADING PANEL BOARD, COMPLETE (IA)	
6	4-900-855-01	COVER	
* 7	4-900-858-01	UPPER CASE	
8	4-812-134-00	RIVET (DIA. 3.5), NYLON	
* 9	4-900-852-01	HOLDER LEVEL	
10	3-363-099-01	SCREW (CASE 3 TP2)	
11	4-951-620-11	SCREW (2.6 × 10), +BVTP	

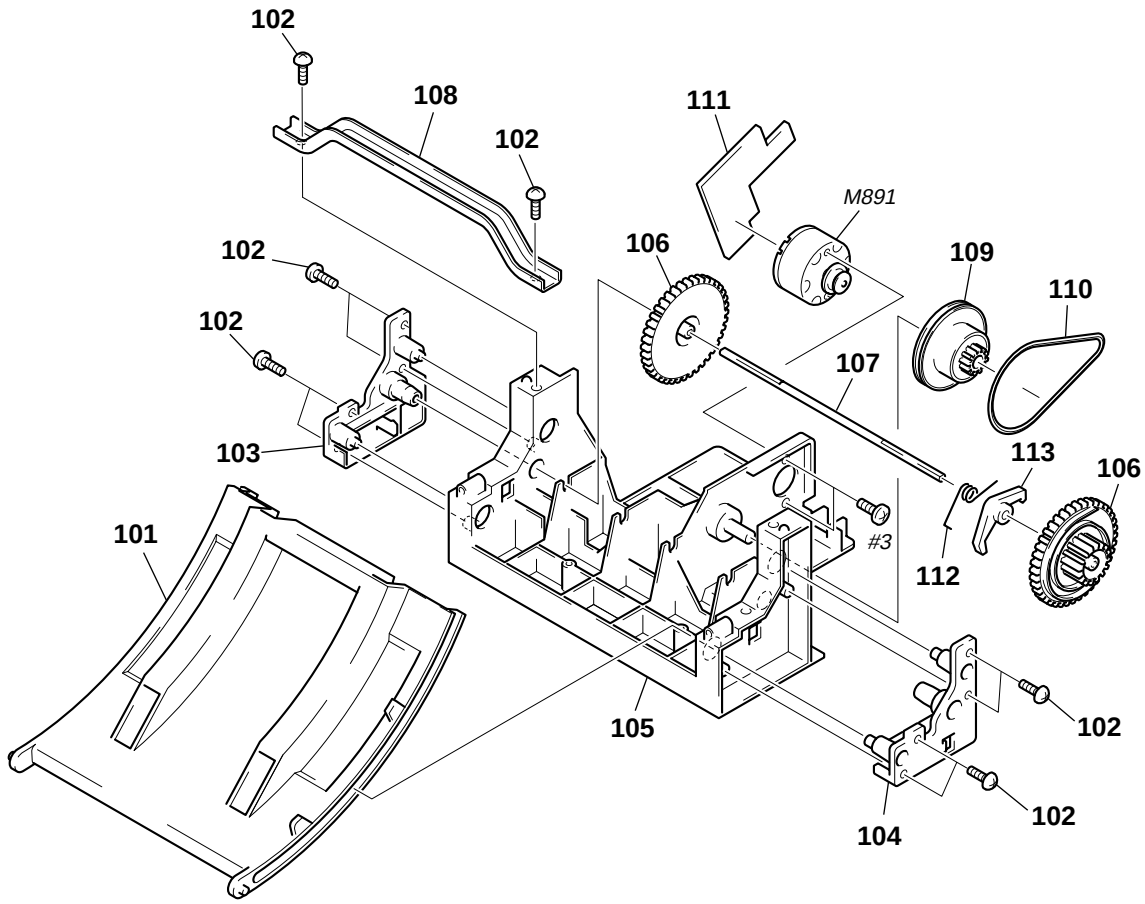
5-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remarks
51	X-4951-776-1	FRONT PANEL ASSY	
53	X-4951-665-1	ESCUTCHEON (L) ASSY	
54	X-4949-994-1	ESCUTCHEON (EQ) ASSY	
57	4-962-708-11	EMBLEM (4-A), SONY	
58	4-951-620-01	SCREW (2.6 × 8), +BVTP	
* 59	A-4414-708-A	MIC/ECHO BOARD, COMPLETE (EA,HK,MY,SP)	
* 59	A-4414-724-A	MIC/ECHO BOARD, COMPLETE (IA)	
* 60	1-669-960-11	HEADPHONE BOARD	
* 61	A-4417-072-A	PANELBOARD, COMPLETE (HK, MY, SP)	
* 61	A-4414-737-A	PANEL BOARD,COMPLETE (IA)	

Ref. No.	Part No.	Description	Remarks
* 61	A-4426-837-A	PANEL BOARD,COMPLETE (EA)	
* 62	4-932-810-11	CUSHION (FL)	
* 63	4-900-849-01	HOLDER (FL)	
* 64	1-669-957-11	FRONT AV BOARD	
65	4-900-845-01	BRACKET SLIDER	
* 66	1-669-964-11	DETECTOR BOARD	
67	4-900-868-11	KNOB (CENTER)	
68	4-900-867-11	KNOB (CONTROL)	
FL601	1-517-775-11	INDICATOR TUBE, FLUORESCENT	
IC504	8-719-070-85	IC KU381-4	

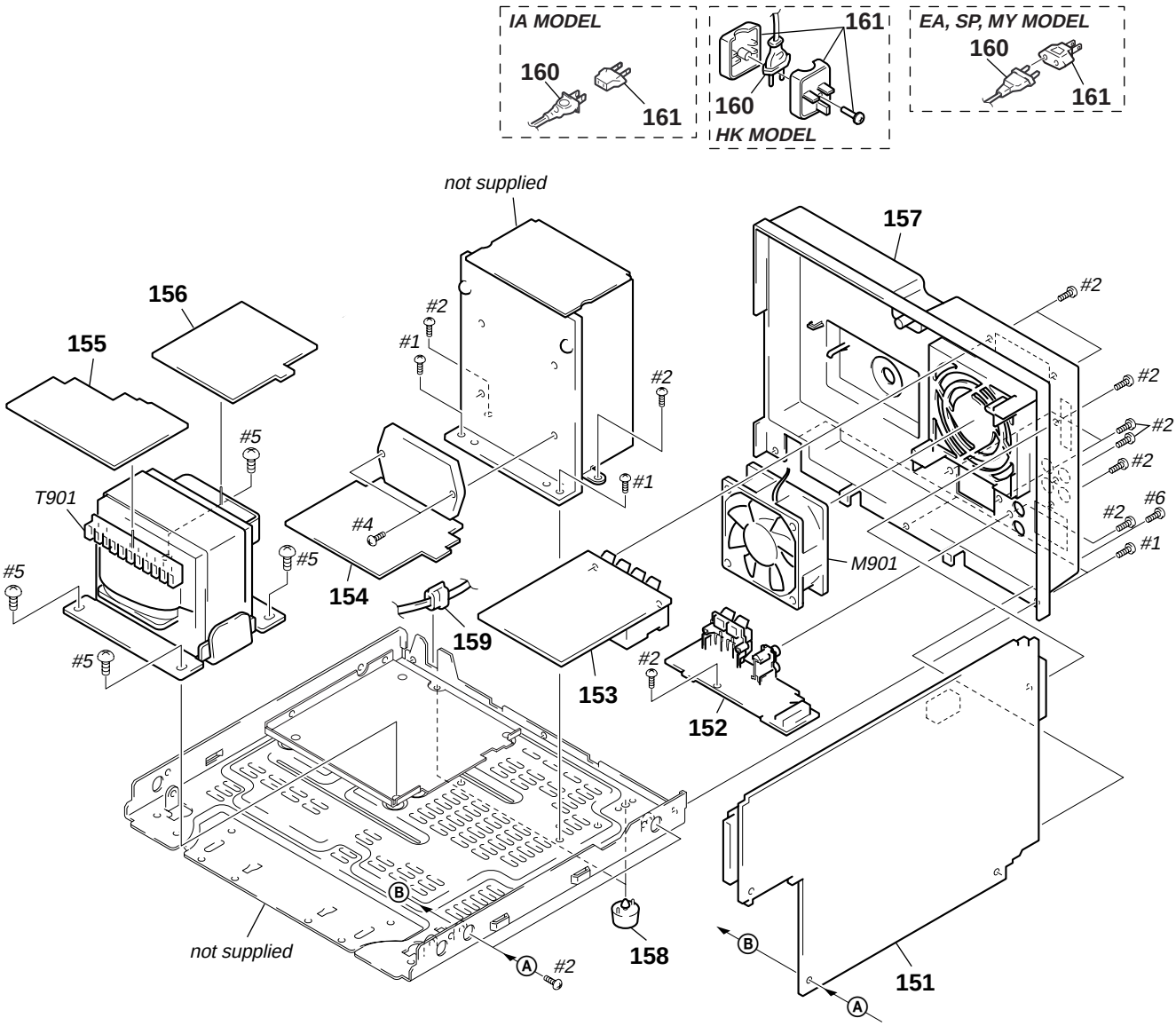
5-3. SLIDE MECHANISM SECTION



Ref. No.	Part No.	Description	Remarks
101	4-900-844-01	LEVEL SLIDER	
102	4-951-620-01	SCREW (2.6X8), +BVTP	
103	X-4950-394-1	HOLDER (L) ASSY	
104	X-4950-395-1	HOLDER (R) ASSY	
* 105	4-210-042-01	BRACKET (SENSOR)	
106	4-900-846-01	GEAR (1)	
107	4-900-862-01	SHAFT CENTER	

Ref. No.	Part No.	Description	Remarks
108	4-900-864-01	BRACKET TOP	
109	4-900-847-01	GEAR (2)	
110	3-344-059-01	BELT (L)	
* 111	1-669-965-11	MOTOR BOARD	
112	4-212-966-01	SPRING LAVEL	
113	4-212-965-01	STOPPER LAVEL	
M891	A-4660-926-A	MOTOR (CDM) ASSY	

5-4. CIRCUIT BOARDS AND BACK PANEL SECTION



Ref. No.	Part No.	Description	Remarks
* 151	A-4419-951-A	MAIN BOARD, COMPLETE (EA,HK,MY,SP)	
* 151	A-4426-429-A	MAIN BOARD, COMPLETE (IA)	
* 152	1-669-963-11	SURR SPK BOARD	
153	1-233-546-32	ENCAPSULATED COMPONENT (AM/FM TUNER)	
* 154	A-4419-954-A	POWER AMP BOARD, COMPLETE (EA,HK,MY,SP)	
* 154	A-4426-428-A	POWER AMP BOARD, COMPLETE (IA)	
* 155	1-669-954-12	SECONDARY BOARD	
* 156	1-669-953-11	PRIMARY BOARD	
* 157	4-900-848-51	BACK PANEL	

Ref. No.	Part No.	Description	Remarks
158	4-970-381-11	FOOT (REAR)	
* 159	3-703-244-00	BUSHING (2104), CORD	
⚠160	1-777-071-21	CORD, POWER (EA,HK,MY,SP)	
⚠160	1-782-315-11	CORD, POWER (IA)	
⚠161	1-569-007-11	ADAPTOR, CONVERSION 2P (IA)	
⚠161	1-569-008-21	ADAPTOR, CONVERSION 2P (EA,MY,SP)	
⚠161	1-770-019-11	ADAPTOR, CONVERSION PLUG 3P (HK)	
M901	1-763-372-11	FAN, DC	
⚠T901	1-433-932-11	TRANSFORMER, POWER	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

DETECTOR | FRONT AV | HEADPHONE | LOADING PANEL

SECTION 6
ELECTRICAL PARTS LIST

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- CAPACITORS:
  uF: µF
- RESISTORS
  All resistors are in ohms.
  METAL: metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F: nonflammable
- COILS
  uH: µH
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA...: µA... , uPA... , µPA... ,
  uPB... , µPB... , uPC... , µPC... ,
  uPD..., µPD...

When indicating parts by reference number, please include the board name.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

- Abbrevation
  HK : Hong Kong model
  SP : Singapore model
  MY : Malaysia model
  IA : Indonesia model
  EA : Saudi Arabia model

Ref. No.	Part No.	Description			Remarks
*	1-669-964-11	DETECTOR BOARD			
		**********			
		< CONNECTOR >			
* CN505	1-568-941-11	PIN, CONNECTOR 3P			
		< SWITCH >			
S892	1-571-300-21	SWITCH, ROTARY (OPEN/CLOSE)			
**********					
*	1-669-957-11	FRONT AV BOARD			
		**********			
		< CAPACITOR >			
C6301	1-162-282-31	CERAMIC	100PF	10%	50V
C6302	1-162-282-31	CERAMIC	100PF	10%	50V
C6303	1-162-306-11	CERAMIC	0.01uF	30%	16V
C6304	1-164-159-11	CERAMIC	0.1uF		50V
		< CONNECTOR >			
* CN6301	1-564-520-11	PLUG, CONNECTOR 5P			
* CN6302	1-560-666-00	PIN, CONNECTOR 3P			
		< DIODE >			
D6301	8-719-911-19	DIODE 1SS133T-72			
D6302	8-719-911-19	DIODE 1SS133T-72			
D6303	8-719-911-19	DIODE 1SS133T-72			
		< JACK >			
J6301	1-784-901-11	JACK, PIN 3P (AV INPUT)			
		< COIL >			
L6301	1-412-473-21	INDUCTOR	0uH		
		< TRANSISTOR >			
Q6301	8-729-900-36	TRANSISTOR	BA1F4M-TP		
		< RESISTOR >			
R6301	1-249-417-11	CARBON	1K	5%	1/4W F
R6302	1-249-417-11	CARBON	1K	5%	1/4W F
R6303	1-249-441-11	CARBON	100K	5%	1/4W
R6304	1-249-441-11	CARBON	100K	5%	1/4W
R6305	1-249-425-11	CARBON	4.7K	5%	1/4W F
R6306	1-249-425-11	CARBON	4.7K	5%	1/4W F
R6307	1-249-425-11	CARBON	4.7K	5%	1/4W F
R6308	1-249-429-11	CARBON	10K	5%	1/4W
**********					

Ref. No.	Part No.	Description			Remarks
*	1-669-960-11	HEADPHONE BOARD			
		**********			
		< CAPACITOR >			
C790	1-162-306-11	CERAMIC	0.01uF	30%	16V
C791	1-162-294-31	CERAMIC	0.001uF	10%	50V
C792	1-162-294-31	CERAMIC	0.001uF	10%	50V
		< CONNECTOR >			
* CN790	1-568-944-11	PIN, CONNECTOR 6P			
		< TERMINAL >			
* G790	1-537-738-21	TERMINAL, EARTH			
		< JACK >			
J755	1-774-728-41	JACK (PHONES)(EA,HK,MY,SP)			
J755	1-770-226-11	JACK (LARGE TYPE) (PHONES)(IA)			
**********					
*	A-4414-709-A	LOADING PANEL BOARD, COMPLETE (EA,HK,MY,SP)			
		**********			
*	A-4414-736-A	LOADING PANEL BOARD, COMPLETE (IA)			
		**********			
		< CAPACITOR >			
C626	1-124-584-00	ELECT	100uF	20%	10V
C627	1-162-306-11	CERAMIC	0.01uF	30%	16V
C628	1-162-306-11	CERAMIC	0.01uF	30%	16V
C629	1-162-306-11	CERAMIC	0.01uF	30%	16V
C630	1-162-306-11	CERAMIC	0.01uF	30%	16V
		< CONNECTOR >			
CN630	1-569-308-11	SOCKET, CONNECTOR (L TYRE) 19P			
		< DIODE >			
D631	8-719-046-39	DIODE SEL5821A-TP15 (GROOVE)			
D632	8-719-046-44	DIODE SEL5221S-TP15 (REW)			
D633	8-719-058-04	DIODE SEL5223S-TP15 (MULTI JOG STATION)			
D634	8-719-046-44	DIODE SEL5221S-TP15 (ENTER/NEXT)			
D635	8-719-046-44	DIODE SEL5221S-TP15 (EFFECT ON/OFF)			
D636	8-719-046-43	DIODE SEL5421E-TP15 (KEY CONTOROL #)			
D637	8-719-046-39	DIODE SEL5821A-TP15 (KEY CONTOROL b)			
D638	8-719-046-44	DIODE SEL5221S-TP15 (NON-STOP)			
D639	8-719-046-44	DIODE SEL5221S-TP15 (DSP)			
D640	8-719-046-44	DIODE SEL5221S-TP15 (PROLOGIC)			
D641	8-719-046-44	DIODE SEL5221S-TP15 (FF)			
D642	8-719-058-04	DIODE SEL5223S-TP15 (MULTI JOG STATION)			

Ref. No.	Part No.	Description				Remarks
		< TRANSISTOR >				
Q531	8-729-900-80	TRANSISTOR	BA1A4M-TP			
Q532	8-729-900-80	TRANSISTOR	BA1A4M-TP			
Q533	8-729-900-80	TRANSISTOR	BA1A4M-TP			
Q534	8-729-900-80	TRANSISTOR	BA1A4M-TP			
Q535	8-729-900-80	TRANSISTOR	BA1A4M-TP			
Q536	8-729-900-80	TRANSISTOR	BA1A4M-TP			
Q537	8-729-900-80	TRANSISTOR	BA1A4M-TP			
Q538	8-729-900-80	TRANSISTOR	BA1A4M-TP			
Q539	8-729-900-80	TRANSISTOR	BA1A4M-TP			
Q540	8-729-900-80	TRANSISTOR	BA1A4M-TP			
		< RESISTOR >				
R632	1-249-407-11	CARBON	150	5%	1/4W	F
R633	1-249-403-11	CARBON	68	5%	1/4W	F
R634	1-249-407-11	CARBON	150	5%	1/4W	F
R635	1-249-413-11	CARBON	470	5%	1/4W	F
R636	1-249-410-11	CARBON	270	5%	1/4W	F
R637	1-249-410-11	CARBON	270	5%	1/4W	F
R638	1-249-413-11	CARBON	470	5%	1/4W	F
R639	1-249-413-11	CARBON	470	5%	1/4W	F
R640	1-249-413-11	CARBON	470	5%	1/4W	F
R641	1-247-807-31	CARBON	100	5%	1/4W	
R642	1-249-407-11	CARBON	150	5%	1/4W	F
R643	1-249-409-11	CARBON	220	5%	1/4W	F
R644	1-249-411-11	CARBON	330	5%	1/4W	
R645	1-249-411-11	CARBON	330	5%	1/4W	
R646	1-249-413-11	CARBON	470	5%	1/4W	F
R647	1-249-415-11	CARBON	680	5%	1/4W	F
R648	1-249-417-11	CARBON	1K	5%	1/4W	F
R649	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R650	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R651	1-247-843-11	CARBON	3.3K	5%	1/4W	
R652	1-249-417-11	CARBON	1K	5%	1/4W	F
R653	1-247-807-31	CARBON	100	5%	1/4W	
R654	1-249-407-11	CARBON	150	5%	1/4W	F
R655	1-249-409-11	CARBON	220	5%	1/4W	F
R656	1-249-411-11	CARBON	330	5%	1/4W	
R657	1-249-411-11	CARBON	330	5%	1/4W	
R658	1-249-413-11	CARBON	470	5%	1/4W	F
R659	1-249-415-11	CARBON	680	5%	1/4W	F
R660	1-249-429-11	CARBON	10K	5%	1/4W	
R661	1-249-429-11	CARBON	10K	5%	1/4W	
R662	1-249-429-11	CARBON	10K	5%	1/4W	
R663	1-249-429-11	CARBON	10K	5%	1/4W	
R665	1-247-843-11	CARBON	3.3K	5%	1/4W	
R666	1-247-843-11	CARBON	3.3K	5%	1/4W	
R671	1-247-807-31	CARBON	100	5%	1/4W	
R672	1-247-807-31	CARBON	100	5%	1/4W	
R673	1-247-807-31	CARBON	100	5%	1/4W	
R674	1-247-807-31	CARBON	100	5%	1/4W	
R675	1-247-807-31	CARBON	100	5%	1/4W	
R676	1-247-807-31	CARBON	100	5%	1/4W	
R677	1-247-807-31	CARBON	100	5%	1/4W	
R678	1-247-807-31	CARBON	100	5%	1/4W	
R679	1-247-807-31	CARBON	100	5%	1/4W	
R680	1-247-807-31	CARBON	100	5%	1/4W	

Ref. No.	Part No.	Description			Remarks
		< SWITCH >			
S631	1-762-751-11	SWITCH, TACTILE (REW)			
S632	1-762-751-11	SWITCH, TACTILE (GAME)			
S633	1-762-751-11	SWITCH, TACTILE (MUSIC)			
S634	1-762-751-11	SWITCH, TACTILE (MOVIE)			
S635	1-762-751-11	SWITCH, TACTILE (PROLOGIC)			
S636	1-762-751-11	SWITCH, TACTILE (CD REPEAT)			
S637	1-762-751-11	SWITCH, TACTILE (FLASH)			
S638	1-762-751-11	SWITCH, TACTILE (DSP)			
S639	1-762-751-11	SWITCH, TACTILE (CD PLAY MODE)			
S640	1-762-751-11	SWITCH, TACTILE (CD EDIT)			
S641	1-762-751-11	SWITCH, TACTILE (NON-STOP)			
S642	1-762-751-11	SWITCH, TACTILE (DBFB)			
S643	1-762-751-11	SWITCH, TACTILE (ENTER/NEXT)			
S644	1-762-751-11	SWITCH, TACTILE (FF)			
S645	1-762-751-11	SWITCH, TACTILE (GROOVE)			
S646	1-762-751-11	SWITCH, TACTILE (KEY CONTORL #)			
S647	1-762-751-11	SWITCH, TACTILE (KEY CONTORL b)			
S648	1-762-751-11	SWITCH, TACTILE (EFFECT ON/OFF)			
S649	1-762-751-11	SWITCH, TACTILE (P FILE)			
S650	1-762-751-11	SWITCH, TACTILE (PLACE)			
S651	1-762-751-11	SWITCH, TACTILE (LOOP)			
S652	1-473-392-11	ENCODER, ROTARY (VOLUME)			
S653	1-473-393-11	ENCODER, ROTARY (MULTI JOG STATION)			
**********					
	A-4419-951-A	MAIN BOARD, COMPLETE (EA,HK,MY,SP)			
		**********			
	A-4426-429-A	MAIN BOARD, COMPLETE (IA)			
		**********			
	7-685-872-09	SCREW +BVTT	3 × 8	(S)	
		< CAPACITOR >			
C103	1-126-963-11	ELECT	4.7uF	20%	50V
C105	1-164-159-11	CERAMIC	0.1uF		50V
C108	1-126-160-11	ELECT	1uF	20%	50V
C111	1-136-171-00	FILM	0.33uF	5%	50V
C112	1-136-161-00	FILM	0.047uF	5%	50V
C113	1-164-159-11	CERAMIC	0.1uF		50V
C114	1-130-480-00	MYLAR	0.0056uF	5%	50V
C115	1-136-159-00	FILM	0.033uF	5%	50V
C116	1-162-301-11	CERAMIC	0.0015uF	20%	16V
C117	1-162-306-11	CERAMIC	0.01uF	30%	16V
C118	1-162-290-31	CERAMIC	470PF	10%	50V
C119	1-162-600-11	CERAMIC	0.0047uF	30%	16V
C121	1-126-964-11	ELECT	10uF	20%	50V
C122	1-162-291-31	CERAMIC	560PF	10%	50V
C123	1-136-165-00	FILM	0.1uF	5%	50V
C124	1-136-165-00	FILM	0.1uF	5%	50V
C125	1-164-159-11	CERAMIC	0.1uF		50V
C126	1-126-964-11	ELECT	10uF	20%	50V
C127	1-104-665-11	ELECT	100uF	20%	10V
C128	1-164-159-11	CERAMIC	0.1uF		50V
C129	1-126-964-11	ELECT	10uF	20%	50V
C131	1-126-961-11	ELECT	2.2uF	20%	50V
C134	1-104-664-11	ELECT	47uF	20%	25V
C135	1-126-959-11	ELECT	0.47uF	20%	50V
C153	1-126-963-11	ELECT	4.7uF	20%	50V

MAIN

Ref. No.	Part No.	Description			Remarks
C161	1-136-171-00	FILM	0.33uF	5%	50V
C162	1-136-161-00	FILM	0.047uF	5%	50V
C163	1-164-159-11	CERAMIC	0.1uF		50V
C164	1-130-480-00	MYLAR	0.0056uF	5%	50V
C165	1-136-159-00	FILM	0.033uF	5%	50V
C166	1-162-301-11	CERAMIC	0.0015uF	20%	16V
C167	1-162-306-11	CERAMIC	0.01uF	30%	16V
C168	1-162-290-31	CERAMIC	470PF	10%	50V
C169	1-162-600-11	CERAMIC	0.0047uF	30%	16V
C171	1-126-964-11	ELECT	10uF	20%	50V
C172	1-162-291-31	CERAMIC	560PF	10%	50V
C173	1-136-165-00	FILM	0.1uF	5%	50V
C174	1-136-165-00	FILM	0.1uF	5%	50V
C175	1-136-495-11	FILM	0.068uF	5%	50V
C176	1-162-306-11	CERAMIC	0.01uF	30%	16V
C177	1-104-665-11	ELECT	100uF	20%	10V
C178	1-164-159-11	CERAMIC	0.1uF		50V
C181	1-126-961-11	ELECT	2.2uF	20%	50V
C183	1-126-960-11	ELECT	1uF	20%	50V
C184	1-162-303-11	CERAMIC	0.0033uF	30%	16V
C186	1-162-292-31	CERAMIC	680PF	10%	50V
C187	1-126-961-11	ELECT	2.2uF	20%	50V
C188	1-126-960-11	ELECT	1uF	20%	50V
C401	1-126-964-11	ELECT	10uF	20%	50V
C402	1-162-306-11	CERAMIC	0.01uF	30%	16V
C403	1-162-294-31	CERAMIC	0.001uF	10%	50V
C404	1-136-495-11	FILM	0.068uF	5%	50V
C405	1-126-957-11	ELECT	0.22uF	20%	50V
C406	1-126-957-11	ELECT	0.22uF	20%	50V
C407	1-104-664-11	ELECT	47uF	20%	25V
C408	1-164-159-11	CERAMIC	0.1uF		50V
C409	1-104-664-11	ELECT	47uF	20%	25V
C410	1-136-495-11	FILM	0.068uF	5%	50V
C411	1-162-305-11	CERAMIC	0.0068uF	20%	16V
C412	1-162-294-31	CERAMIC	0.001uF	10%	50V
C413	1-126-964-11	ELECT	10uF	20%	50V
C414	1-126-964-11	ELECT	10uF	20%	50V
C415	1-104-664-11	ELECT	47uF	20%	25V
C416	1-104-664-11	ELECT	47uF	20%	25V
C417	1-126-964-11	ELECT	10uF	20%	50V
C418	1-126-964-11	ELECT	10uF	20%	50V
C731	1-104-664-11	ELECT	47uF	20%	25V
C732	1-126-964-11	ELECT	10uF	20%	50V
C801	1-136-165-00	FILM	0.1uF	5%	50V
C802	1-136-165-00	FILM	0.1uF	5%	50V
C803	1-128-493-11	ELECT	4700uF	20%	71V
C804	1-128-493-11	ELECT	4700uF	20%	71V
C805	1-126-948-11	ELECT	100uF	20%	35V
C806	1-126-964-11	ELECT	10uF	20%	50V
C807	1-136-165-00	FILM	0.1uF	5%	50V
C808	1-136-165-00	FILM	0.1uF	5%	50V
C809	1-126-943-11	ELECT	2200uF	20%	25V
C810	1-126-943-11	ELECT	2200uF	20%	25V
C815	1-126-940-11	ELECT	330uF	20%	25V
C816	1-126-951-11	ELECT	470uF	20%	35V

Ref. No.	Part No.	Description			Remarks
C818	1-126-959-11	ELECT	0.47uF	20%	50V
C819	1-104-664-11	ELECT	47uF	20%	25V
C820	1-126-959-11	ELECT	0.47uF	20%	50V
C821	1-104-664-11	ELECT	47uF	20%	25V
C822	1-126-940-11	ELECT	330uF	20%	25V
C823	1-126-960-11	ELECT	1uF	20%	50V
C824	1-104-665-11	ELECT	100uF	20%	10V
C825	1-126-959-11	ELECT	0.47uF	20%	50V
C826	1-104-664-11	ELECT	47uF	20%	25V
C851	1-126-964-11	ELECT	10uF	20%	50V
C852	1-104-665-11	ELECT	100uF	20%	10V
C853	1-164-159-11	CERAMIC	0.1uF		50V
C854	1-126-961-11	ELECT	2.2uF	20%	50V
C855	1-126-934-11	ELECT	220uF	20%	10V
C856	1-104-665-11	ELECT	100uF	20%	10V

< CONNECTOR >

*	CN101	1-764-017-21	HOUSING,CONNECTOR(PC BOARD)17P
	CN103	1-774-289-11	PIN, CONNECTOR (PC BOARD) 15P
*	CN131	1-564-507-11	PLUG, CONNECTOR 4P
	CN701	1-778-311-11	SOCKET, CONNECTOR(PC BOARD)30P
*	CN731	1-569-496-11	SOCKET, CONNECTOR 10P
	CN801	1-691-773-11	PLUG (MICRO CONNECTOR) 11P

< DIODE >

	D101	8-719-911-19	DIODE 1SS133T-72
	D102	8-719-911-19	DIODE 1SS133T-72
	D131	8-719-911-19	DIODE 1SS133T-72
	D401	8-719-911-19	DIODE 1SS133T-72
	D402	8-719-911-19	DIODE 1SS133T-72
	D403	8-719-911-19	DIODE 1SS133T-72
	D751	8-719-911-19	DIODE 1SS133T-72
	D752	8-719-911-19	DIODE 1SS133T-72
	D761	8-719-911-19	DIODE 1SS133T-72
	D781	8-719-024-99	DIODE 11ES2-NTA2B
	D801	8-719-302-38	DIODE RBV-602-01
	D802	8-719-911-19	DIODE 1SS133T-72
	D803	8-719-911-19	DIODE 1SS133T-72
	D804	8-719-934-22	DIODE HZS30-2LTA
	D805	8-719-024-99	DIODE 11ES2-NTA2B
	D806	8-719-024-99	DIODE 11ES2-NTA2B
	D807	8-719-024-99	DIODE 11ES2-NTA2B
	D808	8-719-024-99	DIODE 11ES2-NTA2B
	D810	8-719-024-99	DIODE 11ES2-NTA2B
	D811	8-719-024-99	DIODE 11ES2-NTA2B
	D812	8-719-911-19	DIODE 1SS133T-72
	D813	8-719-024-99	DIODE 11ES2-NTA2B
	D821	8-719-024-99	DIODE 11ES2-NTA2B
	D851	8-719-911-19	DIODE 1SS133T-72
	D852	8-719-911-19	DIODE 1SS133T-72
	D853	8-719-911-19	DIODE 1SS133T-72

< TERMINAL >

*	E801	1-537-738-21	TERMINAL, EARTH

Ref. No.	Part No.	Description			Remarks
		< IC >			
IC111	8-759-495-24	IC M62442FP-TP			
IC112	8-759-000-48	IC MC14052BCP			
IC113	8-759-634-51	IC M5218AP			
IC401	8-759-450-96	IC M65850P			
IC402	8-759-140-53	IC MC14053BCP			
IC801	8-759-604-86	IC M5F7807L			
IC802	8-759-604-90	IC M5F7907L			
IC803	8-759-231-53	IC M5F7805L			
IC804	8-759-604-32	IC M5F7810L			
IC851	8-759-111-68	IC uPC1237HA			
		< JACK >			
J101	1-770-613-11	JACK, PIN 4P (MD/VIDEO 1)			
		< COIL >			
L131	1-410-521-11	INDUCTOR	100uH		
L401	1-410-521-11	INDUCTOR	100uH		
		< TRANSISTOR >			
Q121	8-729-422-57	TRANSISTOR	BN1A4M-TP		
Q132	8-729-620-05	TRANSISTOR	2SC2603TP-EF		
Q182	8-729-620-05	TRANSISTOR	2SC2603TP-EF		
Q183	8-729-141-30	TRANSISTOR	2SC3623ATP-LK		
Q401	8-729-119-77	TRANSISTOR	2SA1175TP-FEK		
Q731	8-729-140-04	TRANSISTOR	2SB1116A-TP-LK		
Q732	8-729-620-05	TRANSISTOR	2SC2603TP-EF		
Q801	8-729-141-83	TRANSISTOR	2SB1375		
Q851	8-729-900-63	TRANSISTOR	BN1F4M-TP		
Q852	8-729-900-36	TRANSISTOR	BA1F4M-TP		
Q853	8-729-900-36	TRANSISTOR	BA1F4M-TP		
Q854	8-729-900-63	TRANSISTOR	BN1F4M-TP		
Q855	8-729-195-82	TRANSISTOR	2SC2958-TL		
		< RESISTOR >			
R103	1-249-417-11	CARBON	1K	5%	1/4W F
R104	1-249-441-11	CARBON	100K	5%	1/4W
R105	1-249-441-11	CARBON	100K	5%	1/4W
R106	1-249-417-11	CARBON	1K	5%	1/4W F
R108	1-249-417-11	CARBON	1K	5%	1/4W F
R109	1-249-441-11	CARBON	100K	5%	1/4W
R113	1-247-897-11	CARBON	560K	5%	1/4W
R114	1-247-897-11	CARBON	560K	5%	1/4W
R115	1-249-433-11	CARBON	22K	5%	1/4W
R116	1-249-422-11	CARBON	2.7K	5%	1/4W F
R117	1-247-895-00	CARBON	470K	5%	1/4W
R118	1-249-429-11	CARBON	10K	5%	1/4W
R119	1-249-441-11	CARBON	100K	5%	1/4W
R120	1-249-441-11	CARBON	100K	5%	1/4W
R121	1-249-417-11	CARBON	1K	5%	1/4W F
R122	1-249-417-11	CARBON	1K	5%	1/4W F
R123	1-249-421-11	CARBON	2.2K	5%	1/4W F
R132	1-249-421-11	CARBON	2.2K	5%	1/4W F
R134	1-249-435-11	CARBON	33K	5%	1/4W
R135	1-249-439-11	CARBON	68K	5%	1/4W

Ref. No.	Part No.	Description			Remarks
R136	1-247-883-00	CARBON	150K	5%	1/4W
R138	1-249-437-11	CARBON	47K	5%	1/4W
R139	1-247-903-00	CARBON	1M	5%	1/4W
R140	1-249-441-11	CARBON	100K	5%	1/4W
R141	1-249-418-11	CARBON	1.2K	5%	1/4W F
R142	1-249-437-11	CARBON	47K	5%	1/4W
R145	1-247-887-00	CARBON	220K	5%	1/4W
R153	1-249-417-11	CARBON	1K	5%	1/4W F
R154	1-249-441-11	CARBON	100K	5%	1/4W
R155	1-249-441-11	CARBON	100K	5%	1/4W
R156	1-249-417-11	CARBON	1K	5%	1/4W F
R158	1-249-417-11	CARBON	1K	5%	1/4W F
R159	1-249-441-11	CARBON	100K	5%	1/4W
R163	1-247-897-11	CARBON	560K	5%	1/4W
R164	1-247-897-11	CARBON	560K	5%	1/4W
R165	1-249-433-11	CARBON	22K	5%	1/4W
R166	1-249-422-11	CARBON	2.7K	5%	1/4W F
R167	1-247-895-00	CARBON	470K	5%	1/4W
R172	1-249-429-11	CARBON	10K	5%	1/4W
R173	1-249-421-11	CARBON	2.2K	5%	1/4W F
R182	1-249-421-11	CARBON	2.2K	5%	1/4W F
R184	1-249-435-11	CARBON	33K	5%	1/4W
R185	1-249-439-11	CARBON	68K	5%	1/4W
R186	1-247-883-00	CARBON	150K	5%	1/4W
R188	1-249-437-11	CARBON	47K	5%	1/4W
R189	1-249-429-11	CARBON	10K	5%	1/4W
R190	1-247-895-00	CARBON	470K	5%	1/4W
R191	1-249-417-11	CARBON	1K	5%	1/4W F
R192	1-249-437-11	CARBON	47K	5%	1/4W
R193	1-249-441-11	CARBON	100K	5%	1/4W
R194	1-249-417-11	CARBON	1K	5%	1/4W F
R195	1-249-417-11	CARBON	1K	5%	1/4W F
R196	1-249-429-11	CARBON	10K	5%	1/4W
R340	1-247-843-11	CARBON	3.3K	5%	1/4W
R401	1-249-421-11	CARBON	2.2K	5%	1/4W F
R402	1-249-422-11	CARBON	2.7K	5%	1/4W F
R403	1-249-426-11	CARBON	5.6K	5%	1/4W
R404	1-249-439-11	CARBON	68K	5%	1/4W
R405	1-249-433-11	CARBON	22K	5%	1/4W
R406	1-249-433-11	CARBON	22K	5%	1/4W
R407	1-249-433-11	CARBON	22K	5%	1/4W
R408	1-249-425-11	CARBON	4.7K	5%	1/4W F
R409	1-249-437-11	CARBON	47K	5%	1/4W
R410	1-249-421-11	CARBON	2.2K	5%	1/4W F
R411	1-249-429-11	CARBON	10K	5%	1/4W
R412	1-249-429-11	CARBON	10K	5%	1/4W
R413	1-249-421-11	CARBON	2.2K	5%	1/4W F
R414	1-247-903-00	CARBON	1M	5%	1/4W
R415	1-249-433-11	CARBON	22K	5%	1/4W
R416	1-249-437-11	CARBON	47K	5%	1/4W
R417	1-249-437-11	CARBON	47K	5%	1/4W
R418	1-247-903-00	CARBON	1M	5%	1/4W
R419	1-249-433-11	CARBON	22K	5%	1/4W
R420	1-249-429-11	CARBON	10K	5%	1/4W
R701	1-247-807-31	CARBON	100	5%	1/4W

MAIN MIC/ECHO

Ref. No.	Part No.	Description			Remarks
R702	1-247-807-31	CARBON	100	5%	1/4W
R705	1-247-807-31	CARBON	100	5%	1/4W
R706	1-247-807-31	CARBON	100	5%	1/4W
R707	1-247-807-31	CARBON	100	5%	1/4W
R708	1-247-807-31	CARBON	100	5%	1/4W
R709	1-247-807-31	CARBON	100	5%	1/4W
R710	1-247-807-31	CARBON	100	5%	1/4W
R711	1-247-807-31	CARBON	100	5%	1/4W
R712	1-247-807-31	CARBON	100	5%	1/4W
R714	1-247-807-31	CARBON	100	5%	1/4W
R715	1-247-807-31	CARBON	100	5%	1/4W
R716	1-247-807-31	CARBON	100	5%	1/4W
R717	1-247-807-31	CARBON	100	5%	1/4W
R731	1-249-429-11	CARBON	10K	5%	1/4W
R732	1-249-429-11	CARBON	10K	5%	1/4W
R733	1-249-425-11	CARBON	4.7K	5%	1/4W F
R751	1-249-432-11	CARBON	18K	5%	1/4W
R752	1-249-439-11	CARBON	68K	5%	1/4W
R757	1-249-435-11	CARBON	33K	5%	1/4W
⚠R758	1-215-893-11	METAL OXIDE	1.5K	5%	2W F
R761	1-249-432-11	CARBON	18K	5%	1/4W
R762	1-249-437-11	CARBON	47K	5%	1/4W
R767	1-249-435-11	CARBON	33K	5%	1/4W
R781	1-260-101-11	CARBON	1.5K	5%	1/2W
R782	1-260-101-11	CARBON	1.5K	5%	1/2W
R783	1-260-101-11	CARBON	1.5K	5%	1/2W
R784	1-260-101-11	CARBON	1.5K	5%	1/2W
R801	1-249-431-11	CARBON	15K	5%	1/4W
R802	1-249-431-11	CARBON	15K	5%	1/4W
R803	1-249-429-11	CARBON	10K	5%	1/4W
R804	1-212-982-00	FUSIBLE	100	5%	1/2W F
R851	1-249-431-11	CARBON	15K	5%	1/4W
R852	1-249-435-11	CARBON	33K	5%	1/4W
R853	1-249-429-11	CARBON	10K	5%	1/4W
R854	1-249-397-11	CARBON	22	5%	1/4W F
R855	1-249-441-11	CARBON	100K	5%	1/4W
R856	1-249-429-11	CARBON	10K	5%	1/4W
R857	1-249-433-11	CARBON	22K	5%	1/4W
		< RELAY >			
RY751	1-755-168-11	RELAY			
		< TERMINAL >			
TB751	1-537-240-31	TERMINAL BOARD (CHECKER PIN) (FRONT SPEAKER)			

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Ref. No.	Part No.	Description			Remarks
*	A-4414-708-A	MIC/ECHO BOARD, COMPLETE (EA,HK,MY,SP)			
		**********			
*	A-4414-724-A	MIC/ECHO BOARD, COMPLETE (IA)			
		**********			
		< CAPACITOR >			
C6001	1-162-306-11	CERAMIC	0.01uF	30%	16V
C6002	1-124-257-00	ELECT	2.2uF	20%	50V
C6003	1-162-306-11	CERAMIC	0.01uF	30%	16V
C6004	1-124-257-00	ELECT	2.2uF	20%	50V
C6005	1-162-294-31	CERAMIC	0.001uF	10%	50V
C6006	1-162-215-31	CERAMIC	47PF	5%	50V
C6007	1-162-290-31	CERAMIC	470PF	10%	50V
C6008	1-126-157-11	ELECT	10uF	20%	16V
C6009	1-124-465-00	ELECT	0.47uF	20%	50V
C6010	1-162-215-31	CERAMIC	47PF	5%	50V
C6011	1-162-282-31	CERAMIC	100PF	10%	50V
C6012	1-126-157-11	ELECT	10uF	20%	16V
C6014	1-124-257-00	ELECT	2.2uF	20%	50V
C6015	1-126-160-11	ELECT	1uF	20%	50V
C6016	1-104-664-11	ELECT	47uF	20%	16V
C6017	1-164-159-11	CERAMIC	0.1uF		50V
C6018	1-104-664-11	ELECT	47uF	20%	16V
C6019	1-136-495-11	FILM	0.068uF	5%	50V
C6020	1-162-305-11	CERAMIC	0.0068uF	20%	16V
C6021	1-162-294-31	CERAMIC	0.001uF	10%	50V
C6022	1-126-160-11	ELECT	1uF	20%	50V
C6023	1-161-494-00	CERAMIC	0.022uF		25V
C6024	1-136-167-00	FILM	0.15uF	5%	50V
C6025	1-126-957-11	ELECT	0.22uF	20%	50V
C6026	1-126-957-11	ELECT	0.22uF	20%	50V
C6027	1-136-495-11	FILM	0.068uF	5%	50V
C6028	1-162-294-31	CERAMIC	0.001uF	10%	50V
C6029	1-162-305-11	CERAMIC	0.0068uF	20%	16V
C6031	1-162-306-11	CERAMIC	0.01uF	30%	16V
		< CONNECTOR >			
CN6001	1-506-469-11	PIN, CONNECTOR 4P			
		< DIODE >			
D6001	8-719-911-19	DIODE 1SS133T-72			
D6002	8-719-911-19	DIODE 1SS133T-72			
D6003	8-719-911-19	DIODE 1SS133T-72			
		< TERMINAL >			
* E6001	1-537-738-21	TERMINAL, EARTH			
		< IC >			
IC6001	8-759-634-51	IC M5218AP			
IC6002	8-759-450-96	IC M65850P			
		< JACK >			
J6001	1-770-226-11	JACK (LARGE TYPE) (MIX MIC1)			
J6002	1-750-733-11	JACK (LARGE TYPE) (MIX MIC2)			

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description			Remarks
		< COIL >			
L6011	1-410-521-11	INDUCTOR	100uH		
		< RESISTOR >			
R6001	1-249-429-11	CARBON	10K	5%	1/4W
R6002	1-249-417-11	CARBON	1K	5%	1/4W F
R6003	1-249-429-11	CARBON	10K	5%	1/4W
R6004	1-249-417-11	CARBON	1K	5%	1/4W F
R6005	1-249-441-11	CARBON	100K	5%	1/4W
R6006	1-249-417-11	CARBON	1K	5%	1/4W F
R6007	1-249-433-11	CARBON	22K	5%	1/4W
R6008	1-249-429-11	CARBON	10K	5%	1/4W
R6009	1-247-885-00	CARBON	180K	5%	1/4W
R6010	1-247-807-31	CARBON	100	5%	1/4W
R6011	1-249-433-11	CARBON	22K	5%	1/4W
R6012	1-247-881-00	CARBON	120K	5%	1/4W
R6013	1-249-433-11	CARBON	22K	5%	1/4W
R6014	1-249-433-11	CARBON	22K	5%	1/4W
R6015	1-249-433-11	CARBON	22K	5%	1/4W
R6016	1-249-429-11	CARBON	10K	5%	1/4W
R6017	1-249-437-11	CARBON	47K	5%	1/4W
R6018	1-249-433-11	CARBON	22K	5%	1/4W
R6019	1-249-433-11	CARBON	22K	5%	1/4W
R6020	1-249-431-11	CARBON	15K	5%	1/4W
		< VARIABLE RESISTOR >			
RV6001	1-225-511-21	RES, VAR, CARBON 50K/50K			(MIC LEVEL/ECHO VOL)
**********					
*	1-669-965-11	MOTOR BOARD			
		**********			
		< CAPACITOR >			
C891	1-162-306-11	CERAMIC	0.01uF	30%	16V
C892	1-124-478-11	ELECT	100uF	20%	25V
C893	1-164-159-11	CERAMIC	0.1uF		50V
		< CONNECTOR >			
* CN892	1-568-941-11	PIN, CONNECTOR 3P			
		< DIODE >			
D891	8-719-947-16	DIODE MTZJ-T-72-5.1A			
		< IC >			
IC891	8-759-822-09	IC LB1641			
		< RESISTOR >			
R891	1-249-425-11	CARBON	4.7K	5%	1/4W F
R892	1-249-425-11	CARBON	4.7K	5%	1/4W F
R893	1-249-429-11	CARBON	10K	5%	1/4W
R894	1-249-413-11	CARBON	470	5%	1/4W F
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Ref. No.	Part No.	Description			Remarks
*	A-4426-837-A	PANEL BOARD, COMPLETE (EA)			
		**********			
*	A-4417-072-A	PANEL BOARD, COMPLETE (HK,MY,SP)			
		**********			
*	A-4414-737-A	PANEL BOARD, COMPLETE (IA)			
		**********			
*	4-900-849-01	HOLDER (FL)			
*	4-932-810-11	CUSHION (FL)			
		< CAPACITOR >			
C501	1-162-205-31	CERAMIC	18PF	5%	50V
C502	1-162-205-31	CERAMIC	18PF	5%	50V
C503	1-104-905-11	CAPACITOR	0.22F		5.5V
C505	1-164-159-11	CERAMIC	0.1uF		50V
C506	1-164-159-11	CERAMIC	0.1uF		50V
C507	1-164-159-11	CERAMIC	0.1uF		50V
C508	1-164-159-11	CERAMIC	0.1uF		50V
C509	1-124-589-11	ELECT	47uF	20%	16V
C510	1-162-306-11	CERAMIC	0.01uF	30%	16V
C517	1-162-303-11	CERAMIC	0.0033uF	30%	16V
C518	1-126-157-11	ELECT	10uF	20%	16V
C519	1-126-157-11	ELECT	10uF	20%	16V
C520	1-126-157-11	ELECT	10uF	20%	16V
C521	1-162-306-11	CERAMIC	0.01uF	30%	16V
C522	1-126-157-11	ELECT	10uF	20%	16V
C523	1-126-157-11	ELECT	10uF	20%	16V
C601	1-126-157-11	ELECT	10uF	20%	16V
C602	1-162-306-11	CERAMIC	0.01uF	30%	16V
C603	1-162-294-31	CERAMIC	0.001uF	10%	50V
C604	1-162-294-31	CERAMIC	0.001uF	10%	50V
C605	1-124-261-00	ELECT	10uF	20%	50V
C606	1-124-261-00	ELECT	10uF	20%	50V
C607	1-124-261-00	ELECT	10uF	20%	50V
C608	1-124-589-11	ELECT	47uF	20%	16V
C609	1-162-282-31	CERAMIC	100PF	10%	50V
C610	1-162-288-31	CERAMIC	330PF	10%	50V
C611	1-162-288-31	CERAMIC	330PF	10%	50V
C612	1-162-288-31	CERAMIC	330PF	10%	50V
C613	1-162-288-31	CERAMIC	330PF	10%	50V
C614	1-162-288-31	CERAMIC	330PF	10%	50V
C615	1-162-288-31	CERAMIC	330PF	10%	50V
C616	1-162-288-31	CERAMIC	330PF	10%	50V
C617	1-162-288-31	CERAMIC	330PF	10%	50V
C618	1-162-288-31	CERAMIC	330PF	10%	50V
C619	1-162-288-31	CERAMIC	330PF	10%	50V
C620	1-162-288-31	CERAMIC	330PF	10%	50V
C621	1-162-288-31	CERAMIC	330PF	10%	50V
C622	1-162-288-31	CERAMIC	330PF	10%	50V
C623	1-162-288-31	CERAMIC	330PF	10%	50V
C624	1-162-288-31	CERAMIC	330PF	10%	50V
C625	1-162-288-31	CERAMIC	330PF	10%	50V
		< CONNECTOR >			
* CN501	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P			
CN502	1-778-312-11	PLUG, CONNECTOR (PC BOARD) 30P			
CN503	1-691-650-11	SOCKET, CONNECTOR 19P			
* CN504	1-565-835-11	SOCKET, CONNECTOR 3P			

PANEL

Ref. No.	Part No.	Description			Remarks
		< DIODE >			
D501	8-719-024-99	DIODE	11ES2-NTA2B		
D502	8-719-911-19	DIODE	1SS133T-72		
D504	8-719-911-19	DIODE	1SS133T-72		
D505	8-719-911-19	DIODE	1SS133T-72		
D506	8-719-911-19	DIODE	1SS133T-72		
D507	8-719-911-19	DIODE	1SS133T-72		
D509	8-719-024-99	DIODE	11ES2-NTA2B		
D511	8-719-118-62	DIODE	RD5.6F-T7B1		
D512	8-719-046-80	DIODE	SML19416W-TP4 (MOVIE)		
D513	8-719-046-80	DIODE	SML19416W-TP4 (MOVIE)		
D514	8-719-046-80	DIODE	SML19416W-TP4 (MUSIC)		
D515	8-719-046-80	DIODE	SML19416W-TP4 (MUSIC)		
D516	8-719-046-80	DIODE	SML19416W-TP4 (GAME)		
D517	8-719-046-80	DIODE	SML19416W-TP4 (GAME)		
D518	8-719-046-80	DIODE	SML19416W-TP4 (PLACE)		
D519	8-719-046-80	DIODE	SML19416W-TP4 (PLACE)		
D520	8-719-046-80	DIODE	SML19416W-TP4 (P FILE)		
D521	8-719-046-80	DIODE	SML19416W-TP4 (P FILE)		
D522	8-719-046-44	DIODE	SEL5221S-TP15 (AUTO)		
		< FILTER >			
FL601	1-517-775-11	INDICATOR TUBE, FLUORESCENT			
		< IC >			
IC501	8-759-595-12	IC	uPD780016AYGF-025-3BA		
IC502	8-759-165-82	IC	PST600E-T		
IC503	8-749-011-22	IC	GP1U27X		
IC505	8-759-140-53	IC	MC14053BCP		
IC506	8-759-495-25	IC	BA3833F-E2		
IC601	8-759-261-63	IC	M66004M6FP		
		< COIL >			
L501	1-408-074-00	INDUCTOR	56uH		
L502	1-410-521-11	INDUCTOR	100uH		
		< TRANSISTOR >			
Q501	8-729-119-78	TRANSISTOR	2SC2785TP-HFE		
Q502	8-729-422-57	TRANSISTOR	BN1A4M-TP		
Q503	8-729-422-57	TRANSISTOR	BN1A4M-TP		
Q504	8-729-422-57	TRANSISTOR	BN1A4M-TP		
Q505	8-729-422-57	TRANSISTOR	BN1A4M-TP		
Q506	8-729-422-57	TRANSISTOR	BN1A4M-TP		
Q507	8-729-422-57	TRANSISTOR	BN1A4M-TP		
Q508	8-729-422-57	TRANSISTOR	BN1A4M-TP		
Q509	8-729-422-57	TRANSISTOR	BN1A4M-TP		
Q510	8-729-422-57	TRANSISTOR	BN1A4M-TP		
Q511	8-729-422-57	TRANSISTOR	BN1A4M-TP		
Q512	8-729-900-80	TRANSISTOR	BA1A4M-TP		
Q513	8-729-900-80	TRANSISTOR	BA1A4M-TP		
		< RESISTOR >			
R500	1-249-429-11	CARBON	10K	5%	1/4W
R501	1-247-891-00	CARBON	330K	5%	1/4W
R502	1-249-433-11	CARBON	22K	5%	1/4W
R503	1-249-437-11	CARBON	47K	5%	1/4W
R504	1-249-437-11	CARBON	47K	5%	1/4W

Ref. No.	Part No.	Description			Remarks
R505	1-249-429-11	CARBON	10K	5%	1/4W
R506	1-249-429-11	CARBON	10K	5%	1/4W
R507	1-249-441-11	CARBON	100K	5%	1/4W
R514	1-249-429-11	CARBON	10K	5%	1/4W (EA)
R516	1-249-427-11	CARBON	6.8K	5%	1/4W F
R517	1-249-427-11	CARBON	6.8K	5%	1/4W F
R518	1-247-807-31	CARBON	100	5%	1/4W
R519	1-247-807-31	CARBON	100	5%	1/4W
R520	1-247-807-31	CARBON	100	5%	1/4W
R521	1-247-807-31	CARBON	100	5%	1/4W
R522	1-247-807-31	CARBON	100	5%	1/4W
R523	1-247-807-31	CARBON	100	5%	1/4W
R524	1-247-807-31	CARBON	100	5%	1/4W
R525	1-247-807-31	CARBON	100	5%	1/4W
R526	1-247-807-31	CARBON	100	5%	1/4W
R527	1-247-807-31	CARBON	100	5%	1/4W
R528	1-247-807-31	CARBON	100	5%	1/4W
R529	1-247-807-31	CARBON	100	5%	1/4W
R530	1-247-807-31	CARBON	100	5%	1/4W
R531	1-247-807-31	CARBON	100	5%	1/4W
R532	1-247-807-31	CARBON	100	5%	1/4W
R533	1-247-807-31	CARBON	100	5%	1/4W
R534	1-247-807-31	CARBON	100	5%	1/4W
R535	1-247-807-31	CARBON	100	5%	1/4W
R536	1-247-807-31	CARBON	100	5%	1/4W
R537	1-247-807-31	CARBON	100	5%	1/4W
R538	1-247-807-31	CARBON	100	5%	1/4W
R539	1-247-807-31	CARBON	100	5%	1/4W
R540	1-247-807-31	CARBON	100	5%	1/4W
R541	1-247-807-31	CARBON	100	5%	1/4W
R542	1-247-807-31	CARBON	100	5%	1/4W
R543	1-247-807-31	CARBON	100	5%	1/4W
R544	1-247-807-31	CARBON	100	5%	1/4W
R546	1-249-441-11	CARBON	100K	5%	1/4W
R547	1-247-881-00	CARBON	120K	5%	1/4W
R548	1-249-433-11	CARBON	22K	5%	1/4W
R549	1-249-429-11	CARBON	10K	5%	1/4W
R550	1-249-409-11	CARBON	220	5%	1/4W F
R551	1-249-409-11	CARBON	220	5%	1/4W F
R552	1-247-807-31	CARBON	100	5%	1/4W
R553	1-247-807-31	CARBON	100	5%	1/4W
R554	1-247-807-31	CARBON	100	5%	1/4W
R555	1-247-807-31	CARBON	100	5%	1/4W
R556	1-247-807-31	CARBON	100	5%	1/4W
R557	1-247-807-31	CARBON	100	5%	1/4W
R558	1-247-807-31	CARBON	100	5%	1/4W
R559	1-247-807-31	CARBON	100	5%	1/4W
R560	1-247-807-31	CARBON	100	5%	1/4W
R561	1-247-807-31	CARBON	100	5%	1/4W
R562	1-247-807-31	CARBON	100	5%	1/4W
R563	1-247-807-31	CARBON	100	5%	1/4W
R564	1-247-807-31	CARBON	100	5%	1/4W
R565	1-247-807-31	CARBON	100	5%	1/4W
R566	1-247-807-31	CARBON	100	5%	1/4W
R567	1-247-807-31	CARBON	100	5%	1/4W

Ref. No.	Part No.	Description			Remarks
R568	1-247-807-31	CARBON	100	5%	1/4W
R569	1-249-407-11	CARBON	150	5%	1/4W F
R570	1-249-409-11	CARBON	220	5%	1/4W F
R571	1-249-411-11	CARBON	330	5%	1/4W
R572	1-249-411-11	CARBON	330	5%	1/4W
R573	1-249-413-11	CARBON	470	5%	1/4W F
R574	1-249-415-11	CARBON	680	5%	1/4W F
R575	1-249-417-11	CARBON	1K	5%	1/4W F
R576	1-249-419-11	CARBON	1.5K	5%	1/4W F
R577	1-249-421-11	CARBON	2.2K	5%	1/4W F
R578	1-247-843-11	CARBON	3.3K	5%	1/4W
R579	1-249-425-11	CARBON	4.7K	5%	1/4W F
R580	1-249-429-11	CARBON	10K	5%	1/4W
R581	1-249-433-11	CARBON	22K	5%	1/4W
R582	1-249-439-11	CARBON	68K	5%	1/4W
R583	1-247-807-31	CARBON	100	5%	1/4W
R584	1-249-407-11	CARBON	150	5%	1/4W F
R585	1-249-409-11	CARBON	220	5%	1/4W F
R586	1-249-411-11	CARBON	330	5%	1/4W
R587	1-249-411-11	CARBON	330	5%	1/4W
R588	1-249-413-11	CARBON	470	5%	1/4W F
R589	1-249-415-11	CARBON	680	5%	1/4W F
R590	1-249-417-11	CARBON	1K	5%	1/4W F
R591	1-249-419-11	CARBON	1.5K	5%	1/4W F
R592	1-249-421-11	CARBON	2.2K	5%	1/4W F
R593	1-247-843-11	CARBON	3.3K	5%	1/4W
R594	1-249-425-11	CARBON	4.7K	5%	1/4W F
R595	1-249-429-11	CARBON	10K	5%	1/4W
R596	1-249-433-11	CARBON	22K	5%	1/4W
R597	1-249-403-11	CARBON	68	5%	1/4W F
R598	1-249-403-11	CARBON	68	5%	1/4W F
R599	1-249-403-11	CARBON	68	5%	1/4W F
R600	1-249-403-11	CARBON	68	5%	1/4W F
R601	1-249-403-11	CARBON	68	5%	1/4W F
R602	1-249-403-11	CARBON	68	5%	1/4W F
R603	1-249-403-11	CARBON	68	5%	1/4W F
R604	1-249-403-11	CARBON	68	5%	1/4W F
R605	1-249-403-11	CARBON	68	5%	1/4W F
R606	1-249-403-11	CARBON	68	5%	1/4W F
R607	1-249-415-11	CARBON	680	5%	1/4W F
R608	1-247-807-31	CARBON	100	5%	1/4W
R614	1-249-434-11	CARBON	27K	5%	1/4W
R615	1-249-429-11	CARBON	10K	5%	1/4W
R616	1-249-429-11	CARBON	10K	5%	1/4W
R617	1-249-417-11	CARBON	1K	5%	1/4W F
R618	1-247-843-11	CARBON	3.3K	5%	1/4W
R619	1-249-437-11	CARBON	47K	5%	1/4W
R621	1-247-843-11	CARBON	3.3K	5%	1/4W
R622	1-247-843-11	CARBON	3.3K	5%	1/4W
R623	1-249-425-11	CARBON	4.7K	5%	1/4W F
R631	1-249-410-11	CARBON	270	5%	1/4W F

Ref. No.	Part No.	Description				Remarks
		< SWITCH >				
S501	1-762-751-11	SWITCH, TACTILE (EQ 16kHz)				
S502	1-762-751-11	SWITCH, TACTILE (NAME IN)				
S503	1-762-751-11	SWITCH, TACTILE (CHAR)				
S504	1-762-751-11	SWITCH, TACTILE (EQ MEMORY)				
S505	1-762-751-11	SWITCH, TACTILE (OPEN/CLOSE)				
S506	1-762-751-11	SWITCH, TACTILE (TUNER BAND)				
S507	1-762-751-11	SWITCH, TACTILE (STEREO/MONO)				
S508	1-762-751-11	SWITCH, TACTILE (TUNING MEMORY)				
S509	1-762-875-21	SWITCH, KEYBOARD (KARAOKE PON/MPX)				
S510	1-762-751-11	SWITCH, TACTILE (OPEN/CLOSE)				
S511	1-762-751-11	SWITCH, TACTILE (INSERT)				
S512	1-762-751-11	SWITCH, TACTILE (DELETE)				
S513	1-762-751-11	SWITCH, TACTILE (EQ 16kHz)				
S514	1-762-751-11	SWITCH, TACTILE (FUNCTION)				
S515	1-762-751-11	SWITCH, TACTILE (TIMER SELECT)				
S516	1-762-751-11	SWITCH, TACTILE (CLOCK/TIMER SET)				
S517	1-762-751-11	SWITCH, TACTILE (POWER)				
S518	1-762-751-11	SWITCH, TACTILE (DISPLAY/DEMO)				
S520	1-762-751-11	SWITCH, TACTILE (SURROUND+)				
S521	1-762-751-11	SWITCH, TACTILE (SURROUND-)				
S522	1-762-751-11	SWITCH, TACTILE (DBFB-)				
S523	1-762-751-11	SWITCH, TACTILE (DBFB+)				
S524	1-762-751-11	SWITCH, TACTILE (EQ 63Hz+)				
S525	1-762-751-11	SWITCH, TACTILE (EQ 63Hz-)				
S526	1-762-751-11	SWITCH, TACTILE (EQ 250Hz-)				
S527	1-762-751-11	SWITCH, TACTILE (EQ 250Hz+)				
S528	1-762-751-11	SWITCH, TACTILE (EQ 1kHz+)				
S529	1-762-751-11	SWITCH, TACTILE (EQ 1kHz-)				
S530	1-762-751-11	SWITCH, TACTILE (EQ 4kHz-)				
S531	1-762-751-11	SWITCH, TACTILE (EQ 4kHz+)				
		< VIBRATOR >				
X501	1-760-489-11	VIBRATOR, CERAMIC 5MHz				
X502	1-567-098-41	VIBRATOR, CRYSTAL 32KHz				
**********						
	A-4419-954-A	POWER AMP BOARD, COMPLETE				(EA,HK,MY,SP)
		**********				
	A-4426-428-A	POWER AMP BOARD, COMPLETE (IA)				
		**********				
		< CAPACITOR >				
C901	1-126-963-11	ELECT	4.7uF	20%	50V	
C902	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C903	1-162-282-31	CERAMIC	100PF	10%	50V	
C904	1-126-967-11	ELECT	47uF	20%	50V	
C905	1-126-967-11	ELECT	47uF	20%	50V	
C906	1-136-495-11	FILM	0.068uF	5%	50V	
C907	1-136-495-11	FILM	0.068uF	5%	50V	
C932	1-128-560-11	ELECT	22uF	20%	100V	
C933	1-128-581-11	ELECT	4.7uF	20%	100V	
C934	1-128-552-51	ELECT	47uF	20%	63V	

POWER AMP | PRIMARY | SECONDARY

Ref. No.	Part No.	Description			Remarks
C936	1-162-282-31	CERAMIC	100PF	10%	50V
C937	1-128-560-11	ELECT	22uF	20%	100V
C938	1-126-934-11	ELECT	220uF	20%	16V
C940	1-128-581-11	ELECT	4.7uF	20%	100V
C951	1-126-963-11	ELECT	4.7uF	20%	50V
C952	1-162-294-31	CERAMIC	0.001uF	10%	50V
C953	1-162-282-31	CERAMIC	100PF	10%	50V
C954	1-126-967-11	ELECT	47uF	20%	50V
C955	1-126-967-11	ELECT	47uF	20%	50V
C956	1-136-495-11	FILM	0.068uF	5%	50V
C957	1-136-495-11	FILM	0.068uF	5%	50V
		< CONNECTOR >			
CN902	1-691-770-11	PLUG (MICRO CONNECTOR) 8P			
		< DIODE >			
D903	8-719-911-19	DIODE 1SS133T-72			
D941	8-719-911-19	DIODE 1SS133T-72			
D953	8-719-911-19	DIODE 1SS133T-72			
		< IC >			
IC901	8-749-010-34	IC STK4241MK2			
		< TRANSISTOR >			
Q131	8-729-141-30	TRANSISTOR	2SC3623ATP-LK		
Q181	8-729-141-30	TRANSISTOR	2SC3623ATP-LK		
Q901	8-729-900-36	TRANSISTOR	BA1F4M-TP		
Q902	8-729-140-84	TRANSISTOR	2SC1841TP-PAFAEA		
Q952	8-729-140-84	TRANSISTOR	2SC1841TP-PAFAEA		
Q971	8-729-900-36	TRANSISTOR	BA1F4M-TP		
Q972	8-729-119-78	TRANSISTOR	2SC2785TP-HFE		
		< RESISTOR >			
R133	1-249-425-11	CARBON	4.7K	5%	1/4W F
R134	1-249-437-11	CARBON	47K	5%	1/4W
R183	1-249-425-11	CARBON	4.7K	5%	1/4W F
R184	1-249-437-11	CARBON	47K	5%	1/4W
R901	1-249-417-11	CARBON	1K	5%	1/4W F
R902	1-249-437-11	CARBON	47K	5%	1/4W
R903	1-249-412-11	CARBON	390	5%	1/4W F
R904	1-249-437-11	CARBON	47K	5%	1/4W
R906	1-249-429-11	CARBON	10K	5%	1/4W
R907	1-249-429-11	CARBON	10K	5%	1/4W
R908	1-249-429-11	CARBON	10K	5%	1/4W
R909	1-249-429-11	CARBON	10K	5%	1/4W
R910	1-249-397-11	CARBON	22	5%	1/4W F
R911	1-249-397-11	CARBON	22	5%	1/4W F
R913	1-249-417-11	CARBON	1K	5%	1/4W F
R914	1-249-431-11	CARBON	15K	5%	1/4W
R915	1-249-441-11	CARBON	100K	5%	1/4W
⚠R920	1-217-156-00	REGISTER	0.22	10%	5W F
⚠R932	1-212-881-11	FUSIBLE	100	5%	1/4W F
R933	1-249-421-11	CARBON	2.2K	5%	1/4W F

Ref. No.	Part No.	Description			Remarks
R934	1-249-421-11	CARBON	2.2K	5%	1/4W F
R935	1-249-421-11	CARBON	2.2K	5%	1/4W F
R936	1-249-421-11	CARBON	2.2K	5%	1/4W F
R937	1-249-429-11	CARBON	10K	5%	1/4W
R938	1-247-885-00	CARBON	180K	5%	1/4W
R940	1-249-429-11	CARBON	10K	5%	1/4W
R941	1-249-429-11	CARBON	10K	5%	1/4W
R942	1-249-413-11	CARBON	470	5%	1/4W F
⚠R943	1-212-881-11	FUSIBLE	100	5%	1/4W F
R945	1-249-417-11	CARBON	1K	5%	1/4W F
R951	1-249-417-11	CARBON	1K	5%	1/4W F
R952	1-249-437-11	CARBON	47K	5%	1/4W
R953	1-249-412-11	CARBON	390	5%	1/4W F
R954	1-249-437-11	CARBON	47K	5%	1/4W
R956	1-249-429-11	CARBON	10K	5%	1/4W
R957	1-249-429-11	CARBON	10K	5%	1/4W
R958	1-249-429-11	CARBON	10K	5%	1/4W
R959	1-249-429-11	CARBON	10K	5%	1/4W
R960	1-249-397-11	CARBON	22	5%	1/4W F
R961	1-249-397-11	CARBON	22	5%	1/4W F
R963	1-249-417-11	CARBON	1K	5%	1/4W F
R964	1-249-431-11	CARBON	15K	5%	1/4W
R965	1-249-441-11	CARBON	100K	5%	1/4W
⚠R970	1-217-156-00	REGISTER	0.22	10%	5W F
R971	1-249-441-11	CARBON	100K	5%	1/4W
R972	1-247-885-00	CARBON	180K	5%	1/4W
R973	1-249-441-11	CARBON	100K	5%	1/4W
⚠R974	1-212-849-00	FUSIBLE	4.7	5%	1/4W F
		< THERMISTOR(POSITIVE) >			
THP901	1-807-796-11	THERMISTOR			
**********					
*	1-669-953-11	PRIMARY BOARD			
		**********			
	1-533-293-11	FUSE HOLDER			
		< CONNECTOR >			
CN871	1-564-321-00	PIN, CONNECTOR 2P			
		< FUSE >			
⚠F873	1-532-506-51	FUSE TIME LAG 6.3A/250V			
		< SWITCH >			
S871	1-771-291-11	SWITCH, POWER (VOLTAGE SELECTOR)			
**********					
*	1-669-954-12	SECONDARY BOARD			
		**********			
	1-533-399-11	HOLDER, FUSE			
		< FUSE >			
⚠F874	1-533-949-31	FUSE TIME LAG 8A/250V			
⚠F875	1-533-949-31	FUSE TIME LAG 8A/250V			
⚠F878	1-532-464-31	FUSE TIME LAG 2.5A/250V			
⚠F879	1-532-464-31	FUSE TIME LAG 2.5A/250V			

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description			Remarks
		< RESISTOR >			
⚠R871	1-219-119-81	FUSIBLE	0.1	5% 1/4W F	
⚠R872	1-219-119-81	FUSIBLE	0.1	5% 1/4W F	
**********					
*	1-669-963-11	SURR SPK BOARD			
		**********			
		< CAPACITOR >			
C202	1-104-666-11	ELECT	220uF	20% 25V	
C203	1-162-306-11	CERAMIC	0.01uF	30% 16V	
		< CONNECTOR >			
* CN201	1-569-505-11	PIN, CONNECTOR 10P			
* CN202	1-564-506-11	PLUG, CONNECTOR 3P			
CN781	1-506-468-11	PIN, CONNECTOR 3P			
		< DIODE >			
D201	8-719-024-99	DIODE 11ES2-NTA2B			
D782	8-719-911-19	DIODE 1SS133T-72			
		< JACK >			
J781	1-785-011-11	JACK, PIN 2P (SUPER WOOFER/VIDEO OUT)			
		< RELAY >			
RY781	1-515-622-11	RELAY			
		< TERMINAL >			
TB201	1-537-925-31	TERMINAL BOARD (REAR SPEAKER)			
**********					
		MISCELLANEOUS			
		**********			
3	1-773-125-11	WIRE (FLAT TYPE) (19 CORE)			
153	1-233-546-32	ENCAPSULATED COMPONENT (AM/FM TUNER)			
⚠160	1-777-071-21	CORD, POWER (EA,HK,MY,SP)			
⚠160	1-782-315-11	CORD, POWER (IA)			
⚠161	1-569-007-11	ADAPTOR, CONVERSION 2P (IA)			
⚠161	1-569-008-21	ADAPTOR, CONVERSION 2P (EA,MY,SP)			
⚠161	1-770-019-11	ADAPTOR, CONVERSION PLUG 3P (HK)			
IC504	8-719-070-85	IC KU381-4			
M891	A-4660-926-A	MOTOR (CDM) ASSY			
M901	1-763-372-11	FAN, DC			
⚠T901	1-433-932-11	TRANSFORMER, POWER			
**********					

Ref. No.	Part No.	Description	Remarks
		**********	
		HARDWARE LIST	
		**********	
#1	7-685-647-79	SCREW +BVTP 3 × 10 TYPE2 N-S	
#2	7-685-646-79	SCREW +BVTP 3 × 8 TYPE2 N-S	
#3	7-621-775-20	SCREW +B 2.6 × 5	
#4	7-685-650-79	SCREW +BVTP 3 × 16 TYPE2 IT-3	
#5	7-685-881-09	SCREW +BVTT 4 × 8 (S)	
#6	7-685-872-09	SCREW +BVTT 3 × 8 (S)	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

9-929-004-11

Sony Corporation
Home Audio Company

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